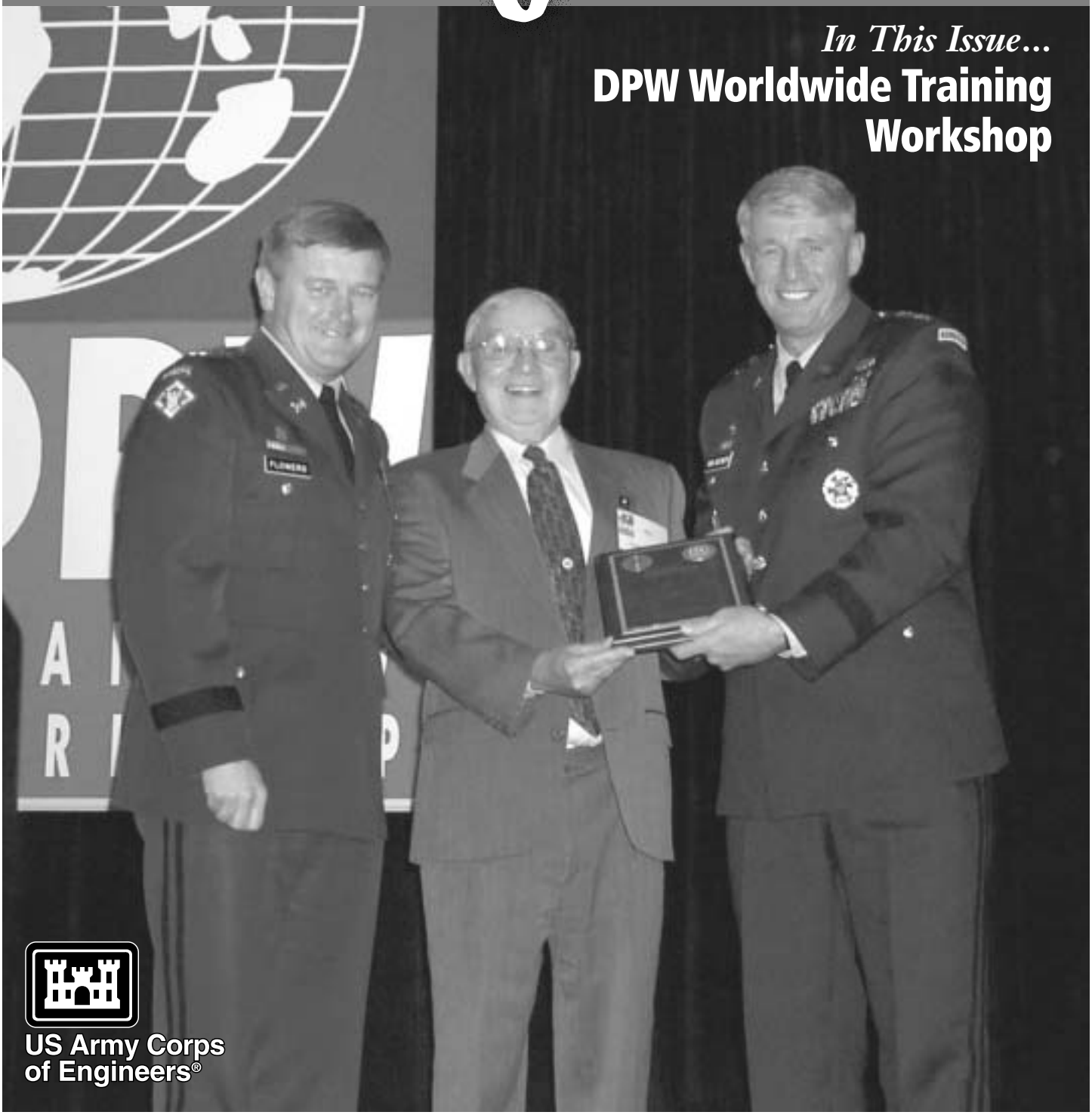
A publication of the Directorate of Military Programs

Public Works Digest

Volume XIV, No. 1 **January/February 2002**



In This Issue...

DPW Worldwide Training Workshop

US Army Corps of Engineers®

Public Works Digest

January/February 2002
Vol. XIV, No. 1

US Army Corps of Engineers®

Public Works Digest is an unofficial publication of the US Army Corps of Engineers, Directorate of Military Programs, Installation Support Division, under AR 360-81. Method of reproduction: photo-offset; press run: 3,000; estimated readership: 40,000. Editorial views and opinions expressed are not necessarily those of the Department of the Army.

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Ed Gibson receives first "Corps Unsung Hero" award.

Printed on recycled paper.

LETTER FROM THE EDITOR

Here we are in 2002. Unfortunately, this our first issue of the New Year is late. I've already had quite a few phone calls and e-mails asking why. Many of you thought you had missed a *Digest* or that we had somehow deleted your name from our distribution list. Not so. An unfortunate delay in renewing our design and print contracts is the cause. We regret that these circumstances are beyond our control, but the next *Digest* (Housing issue) should get us back on track.

The January/February 2002 *Public Works Digest* is an exciting issue with a lot of interesting and useful information. It introduces our new Director of Military Programs, BG Carl A. Strock, who came to us last September from Northwestern Division where he was the commander. Please read his bio on the inside back cover under the "Who's Who at HQ" banner.

By now, you'll have heard of TIM, Transformation of Installation Management, which is set to revolutionize how your installation is managed. It's already begun and should be fully implemented by October 2002. For a more detailed explanation of how the Army is going to do that, be sure to read the article by Mr. Stan Shelton on page 7.

Despite much agonizing, discussion of cancellation and a last-minute hotel switch from the DoubleTree in Virginia to the Baltimore Wyndham in Maryland, the DPW Worldwide Training Workshop was held 11-13 December 2001. As you well know, the annual DPW workshop had been combined/incorporated into the ENFORCE conference at Fort Leonard Wood for the last three years. This was the first solo reappearance of the event and it was a huge success.

From the outset, the more than 600 participants from the United States, Europe and Korea seemed anxious to start and eager to squeeze everything they could out of this large gathering of their peers. But if you think this was just another chance to schmooze and get out of the office, think again. Co-hosted by the US Army Corps of Engineers (HQUSACE) and the Assistant Chief of Staff for Installation Management (ACSIM), the well-planned agenda was designed and organized to give participants many opportunities to learn what was going on at other Army installations and to bring their installation specific problems to the fore.

Plenary sessions introduced the participants to an array of impressive speakers, including Mr. Dave Hobson (Congressman from Ohio), who gave the "Congressional Perspective;" and Mr. John McDonald (Deputy Under Secretary of the Army), who talked about "Army Realignment." The joint workshop committee scored yet another coup in getting Dr. Mario Fiori (Assistant Secretary of the Army) to discuss force protection at the luncheon.

The workshop supported three tracks covered under the broad umbrella of " Facing DPW Challenges" – Privatization, Environment and Best Business Practices. In addition to the many breakout sessions, panels chaired by Mr. Geoffrey Prosch, Deputy Assistant Secretary of the Army for Installations and Environment; Ms. Pat Rivers, Chief of the Environmental Division (USACE), and Ms. Kristine Allaman, Chief of the Installation Support Division (USACE), gave DPWs the opportunity to ask questions and get immediate feedback.

There are several articles scattered throughout this issue, particularly in the Installation Management section, which provide more detailed information from the 2001 DPW Workshop. Those of you who were unable to attend can view all the presentation slides on the USACE home page. Just go to http://www.hq.usace.army.mil/hqhome/ and click on the blue button that says DPW Worldwide Training Workshop.

Also covered in this issue is the CP-18 Managers Workshop, which was held in New Orleans from 29-30 November 2001. The fast-paced one-and-a-half-day program afforded the 65 participants a chance to catch up on the many changes and improvements made to the program in the last 20 months or so.

Addressing the theme of "Recruiting the Capable Workforce," representatives from the USACE Human Resources Directorate presented updates on ACTEDS, the Leadership Development Program, and Training and Professional Development. The Functional Chief's Representative for CP-18, Mr. Bill Brown, also arranged for an independent consultant to conduct a seminar on "Recruiting and Retaining College Students" in an effort to help managers fill some of the void anticipated in the next five years.

Rounding out the Installation Management section is an article by Mr. Rik Wiant on IMI, the Installation Management Institute. Another first, IMI was held in Orlando, Florida, 14-18 January 2002. Hot topics covered included the GIS-Repository, Anti-Terrorism/Force Protection issues, Master Planning and the Army Facility Strategy. Read all about it on page 11.

Until next time...

Alexandra K. Stakhiv

Alexandra K. Stakhiv, Editor, *Public Works Digest* PWD

Corps support to installations

by Alexandra K. Stakhiv

External influences such as A-76 and CA studies, environmental compliance requirements, resource constraints, Transformation and manpower reductions always play a big part in the facilities business on installations. Recently, new anti-terrorism and force protection requirements and support to Transformation of Installation Management (TIM) were added to the mix. At the DPW Worldwide Training Workshop held December 11-13, 2001, BG Carl A. Strock, Director of Military Programs, explained how the US Army Corps of Engineers (USACE) works together with the other major commands and HQDA to support our soldiers in meeting these challenges.

"We have a huge program that is important to our Nation," said Strock. "Our capabilities run the gamut from construction management to engineering/design to disaster response to legal services to real estate. Located throughout the U.S., Europe and Korea, Corps Divisions and Installation Support Offices provide a single point of contact for all support to Army installations. USACE acts as a force multiplier to augment DoD, DA, MACOM and installation staffs with USACE and Professional Services contract personnel."

Some installations have PM Forwards colocated with the DPW. Currently, there are about 30 PM Forwards funded by USACE and most, according to Strock, consider themselves a part of the DPW staff. A major advantage of the PM Forward is the ability to solve problems at the DPW without much district involvement, saving "runaround" time and endless "phone tagging."

Strock listed Corps strengths to include being flexible and able to identify multiple solutions available from the district that best fits the DPW's needs. "We are responsive and can talk one-on-one with the customer, walk to the site, and recommend solutions on the spot," said Strock. "We are also economical because this PM Forward service is provided at no cost to the DPW and we can recommend the appropriate and least costly contractual solution."

"This is a real success story that we hope to continue and expand this as a formal component of TIM. Ideally, we will secure sufficient support to fund a PM Forward at each major installation and a similar position in each region headquarters," Strock said.

Brigadier General Carl A. Strock

The key to successful execution of MILCON is working together. Installations can help by getting involved at the front end of the project with good, solid master planning, said Strock. This means developing and updating installation Master Plans and investing OMA dollars in planning charrettes. "The ACSIM has requested $800,000 of FY 02 funds for planning charrettes for FY 05 projects and they're awaiting the Defense Bill for funding," said Strock. (Note: As of 8 March 2002, the ACSIM has obtained $400,000 and distributed $240,000.)

Stressing the importance of completing all NEPA documentation on time, Strock said that Environmental Assessments and Environmental Impact Statements must be completed before a project goes in the Budget Request (FY 04 projects by 1 July 2002). "We can't schedule awards without them."

Inconsistencies in scope and dollars must be resolved early in the design process. "If the project scope and cost are not well-defined," cautioned Strock, "you have to resist asking for a Congressional Add. You can use the design charrette to make sure this is resolved."

Improving cost management is one of the things USACE is working on. "For FY 01, the award CWE to PA ratio was 97 percent, and the PAs did not include contingency funds," said Strock. The Corps will be using Value Engineering, which documented over $38.7 million savings in FY 01."

The ideal is to have all awards scheduled by the end of the 3rd Quarter. The Districts are trying to schedule all FY 02 projects by 1 August 2002. "Congressional adds and projects that lack parametric design or NEPA documentation will be more difficult," added Strock.

To improve the quality of 1391 review and certification, HQ USACE established a permanent team to support the ACSIM in reviewing 1391s for completeness. FY 02 was the first budget book that the team prepared. The FY 03 budget estimate was submitted in October 2001. "Better 1391s will provide better projects," Strock reminded the audience.

"We also want to facilitate planning and design charrettes by providing timely design ***code*** releases and early advertising authority," he continued. "We are working with the ACSIM to start design earlier in the year to allow for earlier awards in the fiscal year. Districts are being encouraged to use planning charrettes for FY 05 projects and to conduct design charrettes as part of the authorized design effort."

While design build is not the right thing for every project, it can reduce time and cost growth and attract greater innovation from industry on many projects under the right circumstances. Recognizing this, HQ USACE is encouraging the districts to use this acquisition tool whenever it makes "good sense."

There are many environmental challenges that impact today's installations. And these requirements continue to increase even as budgets and installation personnel continue to decline. To help combat this, the Corps supports installations in such areas as the Installation Restoration Program (IRP); Base Realignment and Closure, Environmental Quality (BRAC EQ); and the Defense ➤

State Memorandum of Agreement/ Cooperative Agreement Program.

The Corps' goal is to be responsive, efficient, and capable. "We want to be the provider of choice," said Strock.

An example of Corps support in the environmental arena is acting as the executive agent in the IRP for an inventory of closed, transferring, or transferred ranges on 383 active installations.

The Corps also executes the cleanup of hazardous waste for a majority of installations. In FY 01, it executed $211 million of $230 million of discretionary IRP funds. Under BRAC- ER, the Corps provides full service capabilities that include studies, design, remediation, real estate, legal and technical assistance.

"We have already prepared 72 Integrated Cultural Resources Management Plans for AMC and USARC CONUS-wide and Puerto Rico, and all AMC Integrated Natural Resources Management Plans," Strock said proudly. "The latter was unique because the National Environmental Protection Act (NEPA) and the Installation Natural Resources Management Plan were combined into one document. We also prepare all RCI NEPA and Environmental Baseline Studies."

The Army is going through massive changes as it transforms. Unfortunately, Army installations have significant infrastructure problems, making master planning support more important than ever.

Effective master planning ensures that installation commanders are provided with an integrated approach to real property use and development that will optimize the investment in real property, while ensuring the various initiatives are coordinated and integrated. The reduction in master planning efforts on military installations was one of the major effects of lack of adequate SRM funding. Installations must now face down-sized staffs and limited BASOPS/MILCON resources available to support this effort.

Up to the mid 80s, the Army sponsored a direct-funded master planning program in which USACE supplemented the installation's efforts. The reintroduction of this effort would concentrate USACE planning expertise on meeting the increasingly complex planning efforts facing installations. Strock stressed that he is not interested in USACE taking over the master planning process as its real value is achieved when the installation leadership is in charge of the effort.

For better planning, Strock recommended using both planning charrettes and design charrettes. A planning charrette is held at the installation to get a better determination of the scope of a project and a more realistic cost estimate. The estimated cost of a planning charrette is $20,000 to $25,000. It ensures alignment with the Installation Master Plan while identifying special requirements and site conditions.

The design charrette evolves out of the planning charrette and is simply a layout of the design, in concept form, along with any special requirements. It is chaired by USACE at the installation and it involves architect/ engineers and customers. A design charrette costs $30,000 to $35,000 and provides an excellent forum for "hashing out issues like force protection standards" because all ➤

USACE Centers of Expertise

A few Centers are listed here. A complete list is available at our website:
http://www.usace.army.mil/inet/functions/cw/cecwe/coexpert/index.htm

- Electronic Security Systems
- Protective Design
- Army Range and Training Land Program
- Ordnance and Explosives Center
- Medical Facilities Center of Expertise
- Hazardous, Toxic And Radioactive Waste
- Rapid Response HTRW Center
- Transportation Systems Center
- Preservation of Historic Buildings and Structures
- Heating, Ventilating and Air Conditioning (HVAC) Control Systems
- Water and Wastewater Treatment
- Survey Engineering and Mapping Center

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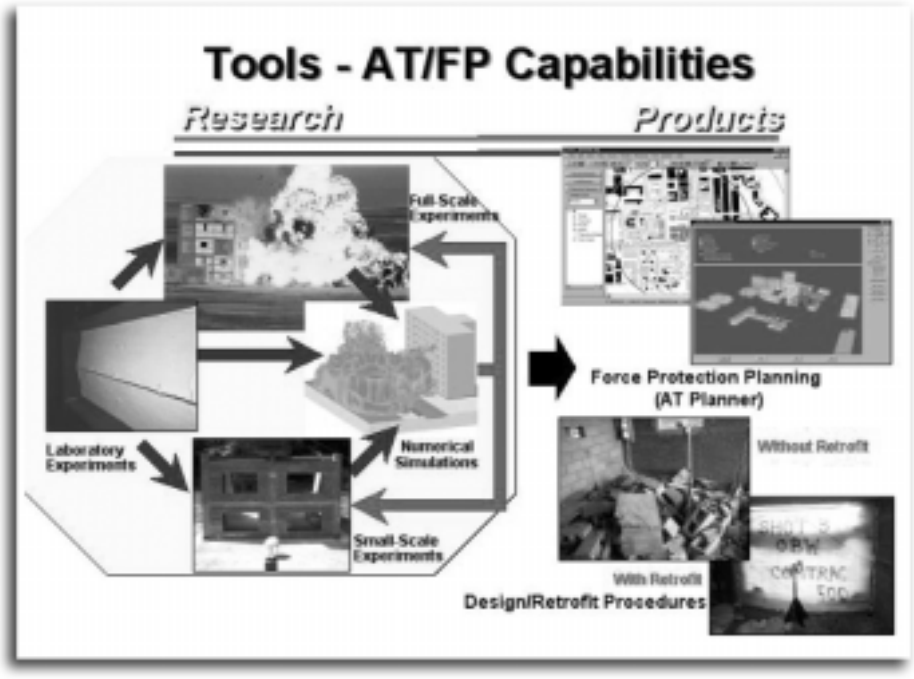

players (AAFES, DeCA, etc.) participate.

"Charrettes are critical to achieving the high level of integration needed for sustainable design and development," said Strock. All designs initiated in FY 02 are now expected to meet the Bronze level in the Sustainable Project Rating Tool (SPiRiT).

Strock also suggested trying the Air Force's Red Zone meeting, where a meeting is held 60 days prior to the BOD and all affected parties discuss the project status and any interrelated actions.

Another tool that is used by USACE to help installations is the SERG—Senior Executive Review Group. Performed at the installation by an installation infrastructure team, it is done at the request of the MACOM or installation. A SERG provides the installation commander a total picture of the installation's infrastructure team, ensures the engineer team understands the commander's priorities and enhances the relationships between the installation commander and the engineer community. A key element of the process is the participation of the ACSIM, HQUSACE and the MACOM Engineer to achieve vertical integration and understanding at every echelon. The installation commander chairs the SERG and sets the agenda.

"Some of you have participated in a SERG," said Strock to the DPWs, "and know the value of getting all the engineers together to understand the commander's Vision for his installation as well as the infrastructure priorities. Our SERG program recently underwent some changes and there are now two different types—installation and MACOM."

Since September 11, installations everywhere are rethinking and relooking the importance of integrating anti-terrorist measures and force protection (AT/FP) in their installation and building plans. The Corps has been active in this area for many years, primarily through the Protective Design Center in Omaha, Nebraska, the Electronic Security Center in Huntsville, Alabama, and the ERDC laboratories.

"We have a suite of tools that range from the simple to most complex," said Strock. "They allow us to model impact and blast effects from a variety of sources and to design and evaluate protective measures. We have also increased emphasis on providing protection from chemical and biological hazards."

The results of Corps research and development can be seen in planning, design and analysis methodologies such as Anti-Terrorist Planner Software, a PC-based tool used across the defense community. Upgrades to design guidance are provided through the Protective Design Center in Omaha and the Physical Security Center of Expertise in Huntsville, Alabama.

Persistent reports from installations with HVAC (Heating, Ventilating and Air Conditioning) problems on their MILCON facilities, primarily barracks, prompted the creation of a joint task force to visit sites and identify existing systemic problems. Composed of representatives from HQUSACE, the ACSIM, several installations and USACE districts, labs and centers, task force members talked to key installation personnel from master planning.

"They're looking at an HVAC master plan to identify standard types of systems and maintenance requirements for a consistent approach to projects at installations," said Strock. A standard control protocol would simplify system setup verification and routine operations and maintenance procedures.

USACE and the ACSIM are also working together to ensure the changes needed for Army Transformation are not neglected. "The bottom line is how do we create installations that will fully support the readiness and deployability of the future forces and maintain wellness and protection at the same time?" asked Strock.

To this end, the Corps is using modeling and simulation tools to support a more rapid and comprehensive analysis of the alternatives and integrating all aspects of economic, environmental, and mission effectiveness in a single decision support capability. This must include the ability to assess basing, installation master planning and design, construction and operation of specific facilities.

"Today's environment and the challenges we face together demand an unparalleled level of interaction if we are to meet installation demands now and in the future," concluded Strock. "The Corps' military and civilian professionals stand ready to help you succeed at your installation."

Alexandra K. Stakhiv is the editor of the Public Works Digest. PWD

Army launches TIM – Transformation of Installation Management

by Stan Shelton

By 1 October 2002, all Army installation management will have had a structural makeover designed to provide tenants and visitors with excellent facilities and quality services.

An initiative known as Transformation of Installation Management (TIM) has been launched to establish a corporate structure, standards and efficiencies applicable to Army installations worldwide. The plan guarantees equal services to all tenants, including the Reserve Components. TIM promises to create synergy in a streamlined system of management that will, above all, ensure efficient resource allocation.

Minimal adjustments will be made to the installation level management system. The object is to streamline the flow of resources and guidance to the installations so they can do an even better job of delivering services.

The Transformation of Installation Management concept was developed by Secretary of the Army Thomas E. White's Realignment Task Force chartered last summer to improve Army management.

While several options are being studied, the TIM structure under consideration is organized with the Assistant Secretary of the Army for Installations and Environment (ASA (I&E)) and the Assistant Chief of Staff for Installation Management (ACSIM) managing and supporting installations Army-wide through a stratified system of Regional Directors.

One of the proposed options in the plan establishes seven regions; three regions located outside of the continental United States and the others located within the continental United States. Over time, management of the Army Reserve installations and Reserve centers will be integrated into the Transformation of Installation Management structure.

The streamlined system allows Senior Mission Commanders to focus on the core responsibility of preparing and training soldiers for combat. Secretary White explained, "If you were the commander of one of the forward-deployed divisions in Europe, the day-to-day concerns of installation management and all the details of that will not be something that you or your staff will have to be directly involved in. You will have an installation management structure there, funded and resourced to meet your priorities and run your installation so that you can focus on preparing [your division] for war."

Under TIM, installation management will no longer be a responsibility for the operational chain of command.

As in many areas, resource allocation is a key issue. "We have had declining budgets for years and a lack of adequate resources to both the mission and the operational support for our installations. As a result, our commanders have had to make some pretty tough choices out there. The mission account always comes first, so if you look at our Army installations, you can recognize what's taken place out there; they've been depressed through the years," said Vice Chief of Staff of the Army General John M. Keane. He explained that TIM creates financial efficiencies and establishes Army standards that will be used to prioritize funds based on need.

With funds being allocated in a more direct line (no filtering through intermediate headquarters), soldiers and their families can expect improved facilities and services at their installations. TIM calls for a reduction in the layers of bureaucracy, which will make life easier for garrison and mission commanders.

The Army-wide standards of the new structure will help in evaluating installation management and the allocation of funds. When adopted, centralized installations will not have to adjust to a tremendous number changes. Instead, commanders should expect more clarity in the definition and documentation of their responsibilities and, from this, subtle improvements should gradually appear on installations.

Tenants, family members, soldiers and garrison employees should expect more efficiency, support and assistance without experiencing any confusion or turmoil during the transitional phases of this project. With standardized management functions, installations should be able to prosper and operate more effectively as an "Army of One" supporting U.S. strategic missions and goals.

For more information, please refer to the TIM web page: http://www.hqda.army.mil/acsimweb/TIMhomepage.shtml

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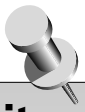

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The rocky road to Transformation

by Stephen C. Reynolds

September 11, the Army is going through a radical change called Army Transformation. It is up to us in the Army engineering community to ensure the necessary changes to Army installations are planned and implemented parallel with changes to force structure, doctrine, and equipment. It is our job to see that the right facilities are there at the right time to enable the success of Army Transformation.

There is still a lot of work to be done given the condition of the infrastructure on our military installations. However, we can be more optimistic in light of the renewed attention being given to military infrastructure issues within the Congress, the Administration, the Department of Defense, and the Services. In joint testimony before the Senate Armed Services Committee in July 2001, Secretary of the Army Thomas E. White and Chief of Staff of the Army General Eric K. Shinseki emphasized that the Army must renovate installation infrastructure at the same time that we transform our Army. Anything else would create an "imbalance" that would have the potential for canceling out any advantages gained by the Transformation.

The radical change needed for Transformation cannot happen overnight, so Army installations must continue to support the Legacy Force as the Army transforms. This is complicated by the response to the security needs of our Nation, even more heightened since we have consistently funded Real Property Maintenance (RPM) at 60 percent of the requirement. This has resulted in facilities with an average age of 40 years, two thirds of which are below standard. Secretary White and General Shinseki have made funding SRM (Sustainment, Restoration and Modernization) one of the Army's greatest concerns. (Note: We have switched to the term SRM because it better describes the intended use of the money and gives a more consistent definition of funding requirements, whether it's maintaining facilities, improving to current standards or meeting new standards.)

MG Van Antwerp and his ACSIM staff developed the Army's Installation Strategy, which includes active and reserve components, and places emphasis on funding maintenance and repair so that investments in facility modernization are protected. The Installation Strategy guides the Army in making intelligent facility decisions and is helping the Legacy Force to "catch up" with the needs of today.

To support Interim Force installation requirements, ACSIM developed a transformation template that establishes "Green Grass" installation requirements for the Interim Brigade Combat Team (IBCT). This template addresses facilities, base operations, installation services and environmental requirements for the Army forces that will be configured into the IBCT units for this early phase of Transformation. As IBCT stationing decisions are made, existing installation conditions will be compared to this template to determine unfulfilled requirements. ACSIM will adjust the template as the Army learns more about the IBCT and refines its requirements.

Parallel with IBCT efforts, we are investigating the long-term requirements needed to transition to installations fully supporting the requirements of the Objective Force. Objective Brigade Combat Team (OBCT) units will be the key components of Army Transformation.

On 6 December 2001, ACSIM and USACE sponsored an Installation Transformation Wargame (see page 9) with participants from DoD, the other services, other government agencies, and the private sector. A key outcome from the Wargame was the establishment of an Installation Battlelab as the test bed to investigate installation change concepts.

After being briefed on the results of the Wargame, the Assistant Secretary of The Army for Installations and Environment (ASA[&E]), Dr. Mario Fiori, and the Director of the Objective Force Task Force (OFTF), LTG Riggs, identified four tasks for the Installation Battlelab.

1. Develop Installation Mission Essential Task Lists (METLs) as a framework to guide installation management priorities and standards of service criteria.
2. Assess the business processes needed to execute Transformation of Installation Management (TIM) at Army, Region and installation levels.
3. Apply decision support tools to assist senior Army leaders as they evaluate Objective Force basing courses of action.
4. Analyze and help prioritize the facility requirements for basing IBCTs.

These are all difficult and challenging issues that will require revolutionary and innovative solutions. As this issue of the Public Works Digest goes to press, ACSIM and USACE have begun the formation of Installation Battlelab teams to partner with other key players from across the ➤

Playing the Installation Transformation Wargame

by Stephen C. Reynolds

The US Army Corps of Engineers (USACE) is working closely with the Assistant Chief of Staff for Installation Management (ACSIM) to help integrate installation change requirements with key decisions on Army Transformation. This will insure that installation requirements are integrated into the total Army Transformation effort now. The goal is to evolve installation capabilities responsive to the requirements derived from the development of the Objective Force and its changes in equipment, training, personnel and operations.

To further this effort, ACSIM and USACE sponsored an Installation Transformation Wargame on 6 December 2001 at Johns Hopkins University, Applied Physics Laboratory. The participants included General Officer and Senior Executive Service players from DoD, Army, the other services, other government agencies, and senior executives from the private sector (see photo).

The game was facilitated by Alvin Toffler Associates using hypothetical scenarios and installation concepts to examine the pros and cons of different installation features to support:

- More rapid and effective deployment and sustainment of US forces,
- Higher levels of unit training and readiness,
- Enhanced force protection and survivability,
- Enhanced wellbeing of service members and their families, and
- Versatility and flexibility to respond to continuous change.

Brainstorming at the "Army Installations Transformation War Game."

The game deliberately posed two starkly different installations:

- Fort Autonomy – a "mega-complex" of bases, each fully self-contained and secured from their surrounding communities; all operations-related and "wellness" infrastructure is inside the wire.
- Fort Synergy – a distributed, mutually-supporting "web" of bases, each highly integrated with their surrounding communities; solely operations-focused, all wellness functions are integrated with the community.

Move 1 required teams representing both installations to deploy Objective Force units overseas as part of a JTF operation, then backfill and train Legacy Force Guard and Reserve units to prepare for subsequent deployment as reinforcements.

Move 2 consisted of analysis in plenary to assemble a top-line Mission Essential Task List (METL) for future power projection installations.

Six primary conclusions emerged from analysis of the game:

1. Installations must transform in sync with Army combat force transformation, or combat force Transformation is at risk.
2. An METL for installations will materially assist in Transformation decision making.
3. Different approaches to critical infrastructure can enhance unit readiness and deployment capability.
4. Select design elements can enable installations to support different force structures and their CONOPS simultaneously.
5. Three of the game hypotheses are ripe for further, detailed tradeoff analysis in a future Decision Support System for installations.
   - Expenses can be reduced significantly without adverse impacts on operations.
   - Ecosystem impact can be reduced significantly without adverse impacts on operations.
   - Installation design choices can address workplace factors that affect quality of life.
6. The Transformation process for installations needs to be Joint.

These conclusions led to six recommendations:

1. Develop an Installation METL to aid in Transformation planning and test it with senior leaders, installation commanders, and other Services.
2. Build on the Army's framework of Doctrine, Training, Leader Development, Organization, Training, and Soldiers (DTLOMS) to guide future installation planning in conjunction with the installation METL to fully integrate

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Army to address these tasks and lay the foundations for the Battlelab to take on additional tasks as needed. To be as flexible and responsive as the evolving requirements, the Installation Battlelab will not be established as a physical entity at a single site. Instead, it will be a virtual organization making extensive use of matrixed teams of experts leveraging Army-wide capabilities, databases, models and simulations.

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Ed Gibson – a Corps Unsung Hero

by Alexandra K. Stakhiv

With tears streaming down his face, a beaming Ed Gibson stood center stage alone during the luncheon held on the opening day of the DPW Worldwide Workshop. Chief of Engineers LTG Flowers was recounting Ed's many accomplishments while Assistant Chief of Staff for Installation Management MG Van Antwerp waited in the wings to present him with a plaque that read "Ed Gibson, Unsung Hero..."

Ed Gibson (center) accepts the first "Corps Unsung Hero" award from Chief of Engineers LTG Bob Flowers (left) and Assistant Chief of Staff for Installation Management MG Robert Van Antwerp.

How do you reward someone who wants no recognition?

Some of you may recall Ed as the Corps' Chief of Military Personnel from 1979 until his retirement as a GS 15 in 1992. And that was Ed's second career! His first began in 1943, when at age 17 he joined the Army as an E-1. He retired as an 06, a veteran of World War II, Korea, and *two* tours in Vietnam.

Ed has also made a third career out of helping public works personnel transition from civilian and military jobs into retirement jobs. Remarkably, this third career has spanned over three decades!

Naming his program 21 Delta Search, Ed has spent countless hours building up his reservoir of resumes and job vacancies. A non-profit organization, 21 Delta Search is dedicated to bringing together the right person with the right job. The 21 Delta reflects the functional area designation given to military officers qualified for facilities management, construction and environmental positions. These folks are the focus of Ed's efforts.

It started between his two tours in Vietnam in the late 1960s. Ed worked as the Deputy Chief of Military Personnel at Headquarters USACE and later became the Chief once the position was civilianized. Almost immediately, he began an offline service providing support that focused on officers, enlisted men and civilians who were retiring.

Initially, he did this mostly on weekends and evenings. Over the years, it expanded into a full-time job and he enlisted the help of his lovely wife. Soon the word got around, and prospective employers started calling Ed whenever they needed someone with DPW experience or a former District engineer or a colonel to do a particular job.

With time, Ed became the go-between or middleman, keeping files (often in his head) on countless retirees. Today, like the Eveready bunny, he just keeps on going and going and going….

And the best part is that his service always was and still is FREE! There is no cost whatsoever. You just call Ed up on the phone or shoot him an e-mail with your resume, and he'll take it from there.

In 2001, the Society for American Military Engineers (SAME) gave Ed Gibson its annual Gold Medal Award in recognition of his many outstanding contributions. Now the Corps too has recognized this "unsung hero" for his dedication to improving the quality of life for retiring public works personnel transitioning into their future. Working tirelessly to bring these individuals and private companies together without any benefit to himself, Ed has truly made a difference in the lives of so many. PWD

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installations into the Army's "System of Systems."

3. Expand participation in installation Transformation efforts, and in planning at existing installations.
4. Develop metrics for key installation functions like ecosystem impact and combat capability.
5. Work with Congress, stakeholders, and others to leverage innovative funding sources for installation transformation.
6. Formally integrate future installations' considerations into the rest of the Army's Transformation activities.

The results of this game will help the Army Secretariat and the ACSIM as they move forward to improve Army installation management processes to support transformation, put installation Transformation in sync with Army Transformation, and clearly frame installation Transformation issues for the Army, DoD, the Administration and Congress.

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PWD

Installation Management Institute held in Orlando

by Rik Wiant

There were over 460 attendees at the first annual Installation Management Institute (IMI), held 14-18 January in Orlando, Florida.

Those of you who didn't have an opportunity to attend might have missed some important things. Not to worry-- the slides and papers presented are now available on the web (some have even been updated from the read-ahead version). You can find them by going to <http://www.hqda.army.mil/acsimweb/imi2002.shtml>. Click on the "Register On-line" button, and then on the "Available Courses."

With up to eight concurrent classes, it was possible to spend the whole week in class, and still miss something important. Check the following:

- GIS-R (Repository)[Course GG04] The prototype Army "enterprise" GIS continues to make good progress. The slides give a good background to both it and GIS in general. (The slides are also in the ISD GIS Library at http://www.hq.usace.army.mil/isd/librarie/gis/gis.htm) One of the messages was that the most important barrier to implementation is the failure of installations to maintain their data in accordance with the Spatial Data Standards, and maintain complete metadata. (Denise Martin of the CADD/GIS Center also had a class on how to comply with the standards.)
- The Army is serious about fixing the backlog of failing critical facilities. The Army Facility Strategy sets out a 20-year program that will give us C-2 facilities across the Army, while maintaining a 67-year revitalization schedule. Wendy Schmidt (ACSIM) explained the program and showed how to implement it within the installation Capital Improvement Strategy (CIS).
- There have been some changes in the Army Facility Strategy, including designating the centrally directed portion as the Focused Investment Program (FIP). The Army's goal is a 20-year program that will give us C-2 facilities across the Army, while maintaining a 67-year revitalization schedule. Wendy Schmidt (ACSIM) explained the program and showed how to implement it within the installation Capital Improvement Strategy (CIS).
- If you thought Real Property 101 was just for new real property specialists, you may have missed Julie Jones' (ACSIM) comprehensive coverage of changes to real property management. The most important change is the development of internal management control checklists for real property management, covering things like annual reconciliation of non-Army tenant real property use, and a real property officer certification process. (This is all part of the Chief Financial Officer's (CFO) Act driven changes that require us to treat real property more like "real money."
- The Army has done a less than stellar job of identifying and managing historical properties. In fact, we have had major discrepancies between the number of historical buildings reported by the cultural resource office and recorded in IFS. We now have new IFS Cultural Resource Screens that provide all the information the cultural resource officer needs, and even prompts him to review eligible properties that he missed. This will help master planners and real property officers as well.
- Jerry Zekert (USACE) covered Anti-Terrorism and Force Protection, as well as the Critical Infrastructure Program. In addition to viewing this presentation, you may want to get copies of the Air Force Facility Protection Design Guide and AT/FP Resource Guide from the Planning Real Property Library.
- Planners who couldn't attend IMI should also check Greg Brewer's and Jerry Zekert's sessions on Master Planning 101, Master Planning Regulation Update and the Real Property Master Planning Digest (or Summary Development Plan). See also the sessions on Sustainable Development and Design.

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(Left to right): Greg Brewer (ACSIM), Jerry Zekert (HQUSACE) and Tony Fasolo (ACSIM) network during a break at the IMI.

GIS standards and policy on front burner

by Rik Wiant and Nancy Blyler

In the last few months, we have seen two long-term Geographic Information Systems (GIS) policy and spatial data standardization activities realized.

First, on 15 November 2001, the National Committee for Information Technology Standards (NCITS), the Executive Committee approved the Spatial Data Standard for Facilities, Infrastructure & Environment (SDSFIE) as an American National Standards Institute (ANSI) standard: NCITS 353. NCITS is accredited by, and operates under rules approved by, the ANSI, and is the forum of choice for information technology developers, producers and users for the creation and maintenance of formal *de jure* IT standards.

The SDSFIE is a nonproprietary geographic information (GI) standard for use with off-the-shelf GIS, Computer Aided Design and Drafting (CADD), and relational database software. The standard, coupled with this software, supports comprehensive master planning, environmental planning, and site planning, engineering, and lifecycle maintenance for facilities/installations, infrastructure, and environmental applications.
The standard can be downloaded from http://tsc.wes.army.mil. For further information on the NCITS approval, look at the article in *Government Computer News* at http://www.gcn.com/vol1_no1/daily-updates/17541-1.html .

Additionally, we now have an official Army GIS policy letter. On 16 October 2001, MG Robert L. Van Antwerp (ACSIM) and BG William G. Webster (Director of Army Training) jointly signed a memorandum on "Data Standards for Computer Aided Drafting and Design (CADD), Geographic Information Systems (GIS) and Related Technologies."

The new guidance clearly states the requirement to use the current version of the appropriate CADD/GIS Center produced standards – the SDSFIE for GIS. It also identifies the projection, datum and applicable accuracy standards and firmly establishes the policy for data sharing.

Army agencies are required to implement Executive Order 12906, which establishes a basis for data sharing "across functional and organizational lines" as well as with other federal, state and local governments in accordance with applicable laws. This does not preclude establishing controls for general viewing, but it does prohibit withholding data from appropriate activities.

Additionally, the policy requires spatial data creators to maintain metadata (data describing their data), and requires documentation by 1 March 2002. The memorandum is posted at http://gis.usace.army.mil.

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End of an era – *FedBizOpps* replaces *Commerce Business Daily*

The Commerce Business Daily (CBD), the old standby that announced government acquisition/contract opportunities to the world, has bit the dust. The CBD has been replaced with the new Federal Business Opportunities or "FedBizOpps," an internet-based publication.

Federal Business Opportunities (www.fedbizopps.gov) was designated in the Federal Acquisition Regulation (FAR) as the single point of universal electronic public access on the Internet to government wide Federal procurement opportunities that exceed $25,000 (see 66 Fed. Reg. 27407, May 16, 2001). Since 1 October 2001, the FAR has required agencies to use FedBizOpps to provide access to public notices of procurement actions over $25,000 that used to be required to be published in the CBD along with associated solicitations and amendments.

Agencies were in a transition period through December 31, 2001. During that time, the FAR required agencies to ensure that notice was provided both to FedBizOpps and the CBD. However, as of January 1, 2002, agencies are no longer required to provide duplicate notice in the CBD and may rely exclusively on the mandatory notice in FedBizOpps to provide the required access.

The Department of Commerce ceased publication of the CBD through the U.S. Government Printing Office in January 2002.

FedBizOpps is now the official source for all procurement information and notices to be published under 41 U.S.C. 416(a)(2)(B) and the Small Business Act (15 U.S.C. 637(e) and (k)). Other notices such as subcontracting opportunities (15 U.S.C. 637(k)) will also be made available to FedBizOpps. All agencies should adjust their solicitation practices to use the electronic notice services of FedBizOpps to announce federal procurement opportunities. PWD

Job Order Contracting update

by Lu Lillie and Fred Reid

The JOC Steering Committee requested several changes to the Army Federal Acquisition Regulation Supplement (AFARS) to enhance the JOC program and save valuable installation resources. In October 2001, the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA{ALT}) published a complete rewrite of the AFARS, including all of the changes requested by the Committee.

Following are the four major changes:

1. Previously, the upper task order limit on a JOC contract was $500,000. However, the DPW could exceed that limit, up to $2 million, if a waiver was obtained from the installation commander. This waiver process required unnecessary staffing and coordination time resulting in delayed project execution. In addition, the $2 million limit was no longer consistent with established project approval levels, which were raised to $3 million in December 1999. *The current AFARS change removed all reference to an upper limit; instead, DPWs will rely on project limits established in AR 420-10 and as delegated to installations by MACOMs and/or HQDA. Additionally, the requirement for a waiver was deleted.*

2. JOC allows for inclusion of non-prepriced (NPP) items not listed in the unit price book but the value must not exceed 10 percent of the total task order value. However, this NPP limit could only be exceeded on modifications to task orders, not the original task order. This restriction was an unnecessary barrier and increased the potential for project splitting or award of an order with a known future modification. *The new AFARS removes this limitation and allows contracting officers the flexibility to make smart business decisions pertaining to the installation's JOC program and the award of JOC task orders.*

3. JOC ordering officers were authorized to sign task orders to accomplish work at a negotiated cost with a set performance period. However, they were not authorized to issue task order modifications to the performance period; only contracting officers could issue these modifications. *The new AFARS allows ordering officers to issue modifications to performance periods. This change will save valuable time for the contracting officers and streamline the JOC execution process for the DPW.*

Lu Lillie

Fred Reid

4. Previous AFARS policy did not allow individuals who negotiate, approve or issue task orders or who are under direct supervision of the ordering officer to prepare independent government cost estimates. This restriction consumed resources that DPWs can no longer afford. Originally, this policy was written to ensure separation of duties (internal controls). However, emphasis for this separation of duties in JOC should be at project scoping and quality assurance/acceptance levels. Separation of duties is addressed elsewhere in the AFARS as well as in the internal control checklist found in the JOC Guide. *The AFARS removes this restriction and frees up valuable resources within the DPW.*

Please take a few minutes and log on to the new JOC web site established by ACSIM, <http://www.hqda.army.mil/acsimweb/fd/policy/facmgtcur.htm> and pass the web address on to your installation personnel. Work continues on the web site, so we appreciate your feedback.

Also, if you notice information that's changed (i.e., phone numbers, new contract information), please send corrections to Lu Lillie for updating. A dot mil internet address is needed to access the Steering Committee section of the web page.

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Correction

In the October/November 2001 issue of the *Public Works Digest*, the article on p.33, titled "Minimizing adverse effects of snow and ice on roofs," contained several errors. The correct spelling of the author's name is James Buska, not James Bushka, and the e-mail address should read james.s.buska@erdc.usace.army.mil. Mr. Buska is a Research Civil Engineer at the Engineer Research and Development Center's (ERDC) Cold Regions Research and Engineering Laboratory (CRREL) in New Hampshire. The correct internet link for the report is http://www.crrel.usace.army.mil/techpub/CRREL_Reports/MP-01-5663.pdf. We apologize for any inconvenience our readers may have encountered in trying to contact Mr. Buska.

Recruiting the capable workforce – can we do it?

by Alexandra K. Stakhiv

CP-18 career program managers met for their annual workshop in New Orleans on November 29-30, 2001. More than 60 participants came from as far away as Alaska and Washington State to discuss the status of the program and learn about recent changes.

In his welcoming remarks, Bill Brown, the Functional Chief's Representative for the CP-18 program, explained that the revised ACTEDS plan is a comprehensive, sequenced path to training, education, and professional development opportunities that provides all the information needed to build programs for career progression.

"Along with the evolution of core technical competencies, ACTEDS integrates the leadership and managerial skills, extensive and diverse training, and development opportunities necessary for creating an agile, flexible, and responsive Army team of engineers and scientists."

Challenging all supervisors, managers, and team leaders present to take a personal interest in mentoring and developing the talents and abilities of their people, Brown added, "You should urge all employees to actively seek training and aggressively approach their development. Tell them to use the ACTEDS to maximize and leverage their professional skills and enhance their career development."

Bert Jemmott (HQUSACE) provided an update on CP-18 changes.

Bert Jemmott, HQUSACE, kicked off the workshop with a background summary of "how" and "why" the improvements to CP-18 came about. A recent validation survey had shown that while there is a high level of interest in information about career ladders, many engineers and scientists for whom the CP-18 program is designed are not even aware of the program, much less its benefits to them. Those who were aware agreed that the CP-18 Army Civilian Training, Education, and Development System Plan, better known as ACTEDS, was badly in need of updating.

Bill Brown (HQUSACE) thanks luncheon guest speaker Betty Throckmorton (OPM).

The validation survey was conducted electronically at HQUSACE, two USACE Divisions, four Districts, and one lab as well as three Army MACOMs, six installations and the Army Environmental Center (AEC). There were over 330 responses from careerists and 25 from program managers. While the data confirmed a lack of understanding of CP-18 in the field, it is still beneficial in providing data that can be used to update career ladders, Jemmott explained.

The Training and Doctrine panels of the Senior Environmental Leadership Conference (SELC) of 2000 reinforced the need for a specific training program for environmental professionals and uniformed specialists. Noting a lack of a career ladder and specific training requirements, SELC participants vowed to develop an action plan for CP-18 and CP-16 to improve both programs for environmental specialists and develop the necessary technical tracks and training needs.

Efforts began at the CP-18 Workshop in August 2000, where Environmental and DPW focus groups were established with Army-wide representation. "We've been working for the last year and a half on changes to the CP-18 program," said Jemmott.

"We've already conducted four 2-day work sessions," he explained. "We also awarded a support contract to develop a web site and update ACTEDS, and we are conducting a survey of careerists and career program mangers."

A Process Action Team (PAT) was formed at the 2000 workshop, consisting of representatives from the Department of Army and USACE, to identify relevant issues, develop recommendations, review contractor progress and provide feedback to the Functional Chief's Representative (Bill Brown).

"Our PAT team defined CP-18 environmental customers as environmental user organizations that hire careerists, such ➤

as Army installations, the Corps of Engineers, and Research and Development laboratories," Jemmott said. "Each one of these requires a supply of competent careerists trained and willing to support the Army's mission. These environmental careerists need information on training, career paths, mentoring and job assignments. Career program managers and human resources personnel advise these careerists and they need guidance and information on training availability, selection criterion, permanent and developmental assignment and assistance in hiring and retaining qualified careerists."

The PAT team stressed the need to market any CP-18 improvements with a recommendation for submitting regular features such as a CP-18 Corner or Career Development Corner to existing Army publications. Other findings included a need for soft skills (budget, information management, legal, human resources, community relations, etc.) in many positions, which are hard to assess and train for, and keeping career managers better informed about hiring, retention and other tools. Small organizations, for example, often cannot accept interns because of their inability to guarantee a permanent position.

"How many of those things have we done so far?" asked Jemmott "Plenty-- we updated career ladders, KSAs (knowledge, skills and abilities), and training requirements and we're studying various mentoring programs. We also created a CP-18 website. Version 1 was reviewed during the summer of 2001 and Version 2, this winter. We let the contract to make the final changes last October."

"To help get the word out about CP-18 improvements and changes, we published articles in AEC's *Environmental Update*, USACE's *The Environment* and USACE's *Public Works Digest*," he continued. "In addition, we gave a CP-18 presentation at the CP-18 Career Program Managers Workshop and sent letters to all CP-18 members when the site was up on the web. CP-18 is also partnering with the Functional Chief's Representative for CP-16 in endorsing web-based tools and looking for other opportunities to partner in the areas of training and developmental assignments.

"We will continue in our efforts to get the word out," concluded Jemmott. The DPW Worldwide Training Workshop held in December 2001 provided a perfect forum for us and we plan to continue taking advantage of similar opportunities. We will update the web-site annually and continue to refine our training program. There is still a lot of work to be done. This is only an 80 percent solution."

Tony Whitehouse, Directorate of Human Resources, HQUSACE, provided an overview of the current recruitment problems, which are topped by the length of the hiring process, high CPOC turnover and difficulty in accessing qualified people. He cited the value of public service, good benefits, flexible work options and long-term stability as some of the many benefits of a federal career.

"The Army is tracking the number of people retiring and currently only 4.7 percent are retiring as soon as they're eligible," stated Whitehouse. "While the average age of the Corps employee is 46 years, they are not leaving to retire—they're leaving for other jobs. Retention is a much bigger concern right now."

Addressing the question of what the Army, the Corps and the Human Resources community are doing to attract new employees, Whitehouse emphasized the importance of a more "corporate" approach to marketing and recruitment, to include taking advantage of recruiting workshops and job fairs, targeting downsizing companies, developing new marketing tools and paying for "licenses" and professional registrations. Some new initiatives being explored include "pay based on contribution to the organization" and "pay banding."

Attracting and hiring interns also received a lot of attention at this workshop. "We currently have summer hire positions in Hawaii, Germany, Korea and Japan," Bill Brown said proudly. "These students become our ambassadors to others ➤

7 Cs of retention for managers – try them!

At the close of the CP-18 workshop, instructor Julie Cunningham listed the following 7 Cs of retention. They represent good business fundamentals that don't cost a lot but can reap big rewards. Resilient and enduring, these strategies really work-- Try them!

1. Live your **Core values and your Culture**.
2. **Connect** and interact frequently by taking full advantage of planned and unplanned activities such as town halls and sports.
3. **Communicate** like you mean it during on-line chats as well as in official remarks.
4. **Create** continuous learning opportunities for employees who want personal development and professional growth through internal learning opportunities, mentoring, and distance learning.
5. **Care** about your employees' career development; they will perform more effectively, have more confidence and exhibit more skills.
6. **Commit** yourself to your people; make yourself accountable. Managers need to manage performance, build morale and listen to employees, but they need to take the time to do this.
7. **Compensate** your employees with tangibles (salaries, benefits, financial incentives) and intangibles to instill a sense of belonging and recognition of a job well done. These include but are not limited to perks such as child centers, fitness centers, telecommuting, flexible hours, and sabbaticals. **PWD**

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when they return. We have 119 positions and we are the only career program to have all of our positions filled. In 2003, we will be able to hire more interns for this 2-year, DA-funded program.

"With decentralized selection of interns, everyone can select their own interns. This means there will be more competition for the same resources."

In closing, Brown stressed the need to take full advantage of professional development courses, the SES tracks, the LDP (Leadership Development Program), and DLAMP (Defense Leadership and Management Program). "The latter program never filled all of its available positions," lamented Brown. "There are tremendous opportunities here! Only one applicant didn't get approved in the last three years!"

Ed Gauvreau (HQUSACE) is the Leadership Development Program Administrator.

Brown also said that CP-18 was giving special emphasis to professional registrations, park rangers and architects in the program and the need to maintain diversity.

Ed Gauvreau, and Beryl Dixon, Program Administrators, HQUSACE, provided brief updates on the LDP and Competitive Professional Development (CPD), respectively. "Selecting officials have been encouraged to give the new graduates of the LDP special consideration for any vacancies they might have," said Gauvreau. The LDP, which is geared towards training and providing developmental opportunities for GS 11, 12 and 13 careerists, will be switching to annual calls for applicants but currently has only 35 new spaces. (A new class started on February 2, 2002.)

CPD involves long-term training related to functional areas. Schools ➤

Strategies for hiring, retaining new college grads

Is there a "brain drain" going on in your office? Are you having a hard time finding qualified new employees? Here's a countdown of the ten best strategies as recommended by the National Association of Colleges and Employers to help your organization hire and retain new college graduates.

10. *Develop an overall hiring strategy that is tied to business goals and identifies your organizational needs.* If you target some core schools, you can customize your marketing to their specific campuses.
9. *Maintain a consistent campus presence.* Start by attending career fairs, interviewing ready-to-hire and continuing to offer educational opportunities. Be serious about recruitment.
8. *The people you send on campuses need to be trained, knowledgeable recruiters.* Take the time to prepare your campus representatives to give a best first and lasting impression. Send mid-level managers or recent graduates—these have best rapport, not HR personnel.
7. *Communicate effectively.* Be quick about your offers and initiate ongoing communication. Apply this responsiveness to all aspects of recruiting and hiring.
6. *Treat all candidates as individuals.* Later, consider customized follow-ups, and try to provide personalized benefits, career tracks and job assignments.
5. *Provide a realistic job preview that gives a balanced picture showing how the job contributes to the organization.* Point out the positives of the organization as well as the negatives. It is important to focus on retention.
4. *Make sure you understand the applicant's expectations.* Ask for their input, give praise, and provide structured mentoring. Allow for opportunities for advancement, job rotations and continuing education.
3. *Offer mini-promotions*, even if it's just temporary, to alleviate employee boredom and foster a sense of accomplishment and advancement.
2. *Build on strengths for retention.* Help build expertise; don't just promote up. Don't waste time on fixing a "bad fit," but don't ignore weaknesses.
1. *Provide the cutting edge by striving for a work/life balance for everyone.* Try to make the work environment as comfortable as possible through flexible scheduling and other programs.

Instructor Julie Cunningham (left) chats with Beryl Dixon (HQUSACE).

Remember that college relations depend on relationships and image. It is important to know the campus, so familiarize yourself with it as though you were a student. Send recruiters who know your organization well, and be sure to send a diversity of recruiters. Prepare screening questions in advance for a two-minute interview.

When talking to students, or any prospective employees, you should have a prepared "brand" statement ready—this is your interpretation of what your organization does. Here's a sample template for a "brand" statement that you can prepare. "Our organization seeks (type of persons) to (type of work) in an (description of environment) that values (what your organization values)."

Students enjoy listening to testimonials from other people working in your organization; they also want to know how you got to where you are. To find the good candidates, you have to be prepared to probe. Don't just ask three questions. Get to know the candidate and follow-up! PWD

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selected should be within 150 miles of applicant's present work location and cost no more than $35,000. "The applicant needs to start preparing the package two to three years in advance," said Dixon. "Career program mangers will be evaluating those packages for benefits to the Army and how the new skills will be used."

The luncheon guest speaker was Betty Throckmorton from the Office of Personnel Management, who leaned heavily on automation promotion. "Our culture is often at odds with itself, making it difficult to maintain a coherent organization," she said. "We didn't have information tools before. The goal is to exploit all that new technology. There is a proposal to establish NETCOM for central management. A big issue at HQ is that there is too much hacking and not enough security.

"Our future holds the potential for realigning 45 percent of the workforce. We need to develop the decision, support the function and corner the money (OMA) and garner efficiencies in savings. However, as we get more systems, we have more and more problems with integration. Nevertheless, the more we automate, the easier our work will be."

Throckmorton also touched on the retirement bubble. "You will need to train the people you haven't grown, and that will take money which we don't have right now.

"The Army is funding a contractor study to get at the selling points of joining the Army," Throckmorton continued. "The goal is to get more focused on target recruitment bases and look at levels other than '*entry*.'

"Since we can forecast how many people we need to replace our workforce, we will try to have an inventory to fill your need before you actually need it," Throckmorton concluded. "We are also working on a system to track your applications at every stage."

Most of Tony Whitehouse's recommendations were echoed and expanded upon by the Recruitment Workshop segment instructor, Julie Cunningham, an independent consultant. Cunningham covered the development of a college relations and recruitment program, selection of specific campuses, school strategies that work, training your recruiters, and conducting campus interviews. Topics such as diversity recruiting were given special attention.

"In the current recruiting environment," said Cunningham, "competition is not as keen as it used to be. Opportunities with the federal government are more attractive today because of the demise of many dot companies and the current trend in downsizing. Many young people are also feeling more patriotic in the aftermath of September 11. You have an opportunity to get the best and the brightest candidates. Now is the time to develop a long-term college recruiting program."

An interesting point made by Cunningham was that, based on a NACE (National Association of Colleges and Employers) survey, the top reason for leaving a job is bad managers, with poor compensation, no opportunity for career advancement and relocation not far behind. We need to work on these factors.

All workshop participants received a copy of "The Employer's Guide to College Recruiting and Hiring," a compendium of best practices for effective college recruitment, to take back to their offices. PWD

Register now…

The Installation Support Training Division (ISTD) at Huntsville, Alabama, has vacancies in the following Training Courses:

CRS # 999 - DPW Program Management

Session 2002-01, 1-5 Apr 2002
Location: Huntsville, AL
Tuition: $750.00

The DPW Program Management Course focuses on oversight into the functional relationships between O&M, ERM, EP&S and other Directorate of Public Works key personnel and those with other Army installation organizations.

This course centers around the ERM, O&M and EP&S Division requirements to direct, coordinate and control DPW Operations, such as:

(1) Master Planning

(2) Resource Management

(3) Execution of the work of Master Planning

(4) Anual Work Plan.

CRS # 989 - DPW Management Orientation Course

Session 2002-01, 10-19 Apr 2002
Session 2002-02, 7-16 Aug 2002
Location (for both sessions): Alexandria, VA
Tuition: $1,200 each

The DPW Management Orientation Course focuses on orientation for new Directorate of Public Works managers and key DPW staff personnel.

This course covers administration, organization, functions, and management systems of the installation DPW to include:

(1) Operations and Maintenance, Army

(2) Army Family Housing

(3) Work Classification and Approval Limits

(4) DPW Financial and Work Management Systems

(5) DPW Resource Management and Annual Work Plans

(6) DPW Automation

(7) Real Property Management and Master Planning

To register for these classes, please call Sherry Whitaker, (256) 895-7425, or Tonya Parker, (256) 896-7421, DSN 760, FAX: (256) 895-7469, in the Registrar Division, USACE Professional Development Support Center, P.O. Box 1600, ATTN: CEHR-P-RG, Huntsville, AL, 35807-4301.

For other information regarding these courses or on-site training sessions, please contact Beverly Carr, Course Manager, (256) 895-7432 DSC 760, FAX: (256) 895-7478, e-mail: beverly.carr@hnd01.usace.army.mil PWD

Huntsville's ISTD fulfills training needs – by building a path to excellence

by Dave Palmer

The Professional Development Support Center (PDSC), Installation Support Training Division (ISTD) joins with all Public Works managers in our vision to provide them with a cost-effective resource to develop their professionals and organizations.

The excellent Public Works organization, an organization that is "better today than yesterday but not as good as it will be tomorrow," is an organization that is staffed with competent persons who know the path to public works excellence. Our mission essential task is to facilitate getting the Army's Public Works organizations onto the path toward excellence. We feel we have captured this in our vision, "Competence in professional competencies," and in our primary goal, "To know and share the path to public works excellence."

The ISTD has two key performance areas:

- Training management (the analysis, design, development and evaluation of training opportunities).
- Training program management (the art of maximizing the holistic training investment).

Reaching our goal celebrates the successes and accepts the challenges of an Armywide collaborative effort. The support and constructive guidance provided by the Office of the Assistant Chief of Staff for Installation Management (ACSIM), US Army Corps of Engineers (HQUSACE), Major Commands (MACOMs), installations, adjunct faculty and supporting contractors make our vision, goals and objectives achievable.

In FY 01, the ISTD conducted 54 sessions, training over 1,300 students. Our major training management actions in FY02 will be a training needs analysis for Public Works organizations in US Army, Europe (USAREUR) and the establishment of an Installation Support Training Management System. These actions will chart the path training will have to take to be effective, provide the means to manage getting there, provide people with job and career information, and present current sources of training.

Our training program will concentrate on finding sources of training for core program management competencies and providing current organizational, process and systems training.

Why training? Training is the key to mission success. It is required to implement new ideas, to prepare new players, to execute new initiatives, and to develop new career paths and goals. The ISTD wants to avail training for those willing to use it. Our goal is to train the tasks that need to be trained, primarily those linked to organizational goals.

ISTD Courses for FY02 are offered under the three competency training areas as indicated below:

Technical and Tools

Integrated Facility System (IFS) courses
Master Planning Skills
Real Property Skills
Military Construction (MILCON);
Economic Analysis

Program Management

Contract Courses
Public Works Orientation Course
Public Works Basic Course
Basic Finance
The CorpsPath
Project Management Business Process
Leadership Education and Development (LEAD)
OLE

Functional Management

Program Management Course
Master Planning
Real Property Management

To better determine training requirements, it is necessary to perform a training analysis. We need to know where knowledge is more cost effective than ignorance. We need to know the core competencies required to do our mission essential task list (METL). We need to develop our professionals effectively.

Dave Palmer is the Chief of the Installation Support Training Division at Huntsville.

We also need the answers to many employee and supervisor questions. Questions such as: What are the training requirements for employee development for present and target positions? What are the knowledge, skills, abilities (KSAs) for my current and future position? What are the duties tasks for my current future positions? What courses train the duties/tasks for my current/future position? What are the tracks/paths to target positions?

A thorough analysis should also answer the training managers' questions. What courses are available for employee training and development for each job position? What career tracks are available for employee progression? How do I get the right training to the right people? What courses develop the KSAs required for the METL?

An installation's METL should do the following:

(1) Provide a trained and ready military and civilian workforce.

➤

(continued from previous page)

(2) Maintain and support positive community relations.
(3) Conduct power projection operations (deployment support and RSO).
(4) Expand area support for contingency operations as required.
(5) Provide installation management support within the AOR, including force protection, training and education, housing, health training and education, housing, health care and community-support and service.

Garrison and installation support activity commands will provide operational guidance for public works (facilities engineering, housing, environment); real property master planning; and USACE assistance; preventing unauthorized changes to structures. Directors of public works will provide real property; maintain real property; operational and municipal services

The areas of consideration for the ISTD are twofold: mission and business. Under mission areas, we look at program management, to include business, communication, influence, management, problem solving and technical. Under business areas, we look at training management and training program management.

The objective of training management is to align training and job/position progression opportunities with critical public works functions, identify training requirements and establish a training management plan. Program management provides quality instruction at the right time, place and cost-- in general, to train public works mission essential tasks, program management competencies, organizational functional competencies and technical competencies.

For course descriptions and schedules, please visit the PDSC FY2002 Purple Book website at http://wwww.hnd.usace.army.mil

POC is Dave Palmer, (256) 895-7751, e-mail: david.c.palmer@hnd01.usace.army.mil

Dave Palmer is the Chief, Installation Support Training Division, Professional Development Support Center, at Huntsville, Alabama. PWD

PROSPECT course openings

There are a few slots open in the following upcoming PROSPECT Courses.

#990-DPW JOC Basic, Session 2002-02, 22-26 April 02 at the Bevill Center in Huntsville, Alabama. This session is scheduled the week prior to the sequel course of Crs. #991-DPW JOC Advanced, Session 2002-01, 29 April-1 May 02 at the Bevill Center. The tuition for each course is $625. per student.

#974-DPW Performance-Based Services Contracting, Session 2002-01, 10-14 June 02 at the Bevill Center in Huntsville, Alabama. The tuition is $610. per student for this course.

#999-DPW Program Manager, Session 2002-01, 1-5 April 02 at the Bevill Center in Huntsville, Alabama. The tuition is $750. per student for this course. The DPW Program Management Course focuses on oversight into the functional relationships between Operations & Maintenance (O&M), Engineer Resource Management (ERM), Engineering Plans & Services (EP&S) and other Directorate of Public Works key personnel and those with other Army installation organizations.

 # 989 - DPW Management Orientation Course, Session 2002-01 (10-19 Apr) and Session 2002-02 (7-16 Aug), both at Alexandria, Virginia. The tuition is $1200 per student for this course. The DPW Management Orientation Course focuses on orientation for new Directorate of Public Works managers and key DPW staff personnel. This course covers administration, organization, functions, and management systems of the installation DPW.

All course descriptions and related information may be found at website: <http://pdsc.usace.army.mil>. To register, you must submit a DD Form 1556 (or equivalent form) to the Registrar's Office, (800) 599-3011 or (256) 895-7425 DSN 760. A completed DD Form 1556 may be faxed to the Registrar at (256) 895-7469. PWD

Showcase your installation

Would you like to see your installation featured in the Public Works Digest?

If you have an interesting story to tell, call us at (202) 761-5778 and you may be on our next cover.

2001 DPW Worldwide

Goeffrey Prosch (Deputy Assistant Secretary of Army for Installations and Environment) (left) and Bill Ambruster (soon to be Deputy Assistant Secretary for Privatization) turn for a better view of partcipants.

MAJ Dick Blaser (left) and MAJ Andy Johnson (right) brought everyone up to speed on anti-terrorism/ force protection issues.

COL Peter Topp (right), Fort Carson DPW, listens as the Honorable Dave Hobson from Ohio (center) responds to a question on 1391s.

Harry Goradia (HQUSACE) gives a lively presentation on Sustainable Design and Development.

MG Robert Van Antwerp (ACSIM) introduces the Transformation of Installation Management concept.

Miriam Ray (ACSIM) (left) and Joe Manno (ACSIM) (right) demonstrate the workings of the GIS-Repository.

Training Workshop

Chief of Engineers LTG Bob Flowers and Assistant Chief of Staff for Installation Management MG Robert Van Antwerp review the agenda for the day.

Dr. Mario Fiori (Assistant Secretary of the Army) was the luncheon guest speaker.

(L to R) Ray Stoudenmire (FORSCOM) and Jim Lovo (HQUSACE) catch up with John Toenes (Alaska).

John McDonald, Deputy Under Secretary of the Army (left), explains how the Army is realigning as John Nerger (ACSIM) listens.

Ed Gibson (center) explains how his Delta 21 Search organization helps civilian and military retirees.

Mirko Rakgjija (Huntsville) (right) mans the Huntsville Center of Expertise booth during a break.

John Krajewski (ACSIM) (right) provides his phone number after his Facilities Engineering update.

Federal Planning Division Workshop coming up

by Rik Wiant

Have you made your reservation for the Annual Federal Planning Division (FPD) Workshop? You can still get it in if you hurry, since you can register on-line at the FPD website (<http://www.fedplan.org>). You can also get the general schedule and hotel information.

As always, the FPD Workshop is being held in conjunction with the American Planning Association National Conference in Chicago, Illinois. For Army members, the workshop starts at 1300 hours on 10 April with a special Army session. The Master Planning field will be significantly impacted in the new Transformation of Installation Management (TIM) structure, presenting both challenges and opportunities. We will try to bring everyone up to date in this session, along with addressing a number of other changes. The Army Session agenda will be available on the Planning and Real Property Library website by March.

The FPD Workshop proper starts next morning and concludes at 11am on Saturday (which would allow you also to attend the APA weekend sessions [special rate], and still be back in the office on Monday.

There were a lot of good suggestions for workshop topics. These have now been winnowed down to 24 sessions. The entire list should be available on the website soon.

As you might expect, there are several sessions on force protection and planning. There are also quite a few GIS and planning sessions, as well as some on regional planning (something that will become much more important with the Army's pending reorganization of installation management). And there are some excellent sessions on planning and environmental management, including "A Funny Thing Happened on the Way to Our Categorical Exclusion: How NEPA Can Provide Better Alternatives When You Want Them."

Along with getting your workshop reservation in, don't forget to make your hotel reservation.

(Note: Members should also download and mail the officer's election ballot.)

Rik Wiant

POC is Rik Wiant, CEMP-IP, 202-761-5788 DSN 763, e-mail: fredrik.w.wiant@hq02.usace.army.mil PWD

Job announcements made easy

There is now a U.S. Government-wide vacancy notification system at USAJOBS (<http://profiler.usajobs.opm.gov/>). It is easy to sign up and it works well. With this, USACE has shut down its Vacancy Notification System.

Coming soon

Look for the March/April 2002 issue of the *Public Works Digest* on Housing issues.

Submit your articles and photographs to the *Public Works Digest*

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US Army Corps of Engineers
Directorate of Military Programs
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Fort Huachuca to study wind power as alternative energy source

by Tanja Linton

In an ongoing effort to develop alternative energy sources, officials at Fort Huachuca are looking at wind and will implement two pilot projects.

The first project is to install a temporary, 132-foot tower to gather wind data, such as wind speed and direction. Working in partnership with the Tucson Electric Power Company, the post's electric provider, officials will collect wind data to determine the viability of erecting wind turbines at that site as a source of electricity for the post.

The data tower will be installed in December. The tower will be located on the South Range, one mile north of the Tethered Aerostat Radar Site.

In addition, post officials awarded a contract to local business, Castro Electric, to install a small wind turbine on the West Range. The cost of the project is about $71,000. The ten kilowatt, Bergey wind turbine will be installed at the intersection of Canelo and Blacktower Roads. The 23-foot diameter, three blade turbine will be installed on a 120-foot guyed lattice tower in January. In agreement with TEP, a meter and meter base will be installed on the turbine and connected to the post's electrical grid to measure the electricity generated.

A wind turbine was installed at Fort Huachuca in February 2002.

Wind energy is one of the most environmentally friendly ways to produce electricity. It uses no water, produces no excess heat and has no emissions.

With these pilot projects, officials here will study the potential for wind over the next several years.

Previous studies done from 1995 to1996 in conjunction with the National Renewable Energy Lab in Golden, Colorado, have shown the potential for wind power on Fort Huachuca. These new initiatives not only support the post's already aggressive energy conservation program, but may also provide a significant cost saving.

Fort Huachuca uses 100 million kilowatt-hours per year with a current annual cost of $6.65 million, which works out to 6.65 cents per kilowatt-hour. Electricity generated on post, through commercial scale wind turbines will save 1.9 cents per kwh.

Prior to implementing these two pilot projects, archeological surveys were completed, as was consultation with Native American tribes and concurrence from the U.S. Fish and Wildlife Service. A Record of Environmental Consideration was also completed.

For more information on the Bergey Excel wind turbine, go to www.bergey.com.

Tanja Linton, (520) 533-1287, is a public affairs specialist at Fort Huachuca, AZ. PWD

Fort Irwin DPW begins energy generation studies

The Department of Energy has selected the Director of Public Works at Fort Irwin, California, to conduct three studies targeted to reduce their growing energy bills. The summer time price of power in California has risen by 30 percent since deregulation took affect in that state. The DPW's summer bills have risen from $1.2 million a month to as much as $1.8 million.

The DPW applied to the Department of Energy for Federal Energy Management Program funds and has been approved for three studies whose purpose is to reduce power consumption during peak power demand periods. The first study is to produce ice during off-peak periods that will be used to reduce HVAC chiller loads during peak power demand times. The price of power during peak periods can reach 23 cents per kilowatt-hour versus six cents at night. Additionally, there is a peak demand charge of $23 per kWhr during these periods. Just one kilowatt reduced between 1200 and 1800 hours can save $23.23.

The other two projects are in the arena of power generation. The fort is going to study the use of water wheel power generation at its sewage treatment plant. Over 1 million gallons of treated water flows through the plant daily, and the study will determine the use of water wheels to capture some of the energy and convert it to electricity.

The DPW is also studying the installation of photovoltaic panels on new construction to further reduce peak loading times requirements. Rather than look at how much power new facilities will use when completed, the fort is looking at how much power can they generate.

For additional information, please contact Rene Quinones at (760) 380-5048 or Kevin Maggs at (760) 380-4987.

Rene Quinones is the energy manager for Fort Irwin, CA. PWD

Problems at Fort Tank – *a Joe Sparks adventure*

by Ron Mundt

Tom Luu

Joe Sparks got out of his car slowly and approached his office building on Fort Tank. It had been a long vacation and he was a bit slow getting motivated. Having been out of the loop for some time, Joe was hoping there would be a challenging problem on his desk to get him going. This would not be unusual since Joe's job as electrical engineer was to support Command, Control, Communication, Computer, Intelligence, Surveillance and Reconnaissance (C4ISR) facilities worldwide.

As soon as Joe opened the door of his office, he noticed a phone message from his old college roommate, John Drill. John had chosen a career path in management and was currently the Director of Installation Support (DIS) at Fort Beetle Bailey. Joe quickly returned the phone call and after exchanging pleasantries, John described his problem.

Fort Beetle Bailey is supplied electrical power from two 115 kV-13.8 kV delta-wye grounded transformers via a government owned double-ended substation with a normally open tie circuit breaker. There is a South and North side of the substation, and each side has five feeder circuit breakers that distribute power to different parts of the post. However, the South side has a sixth feeder that supplies power to a wye connected capacitor bank used for power factor correction.

When energized, the North side feeders operate correctly, while the South side substation experiences arcing within the switchgear DC indicating lights and inside the induction disk relays. When the capacitors are manually disconnected from the system, the arcing problems are not present.

John Drill told Joe that he was sure the problem was with the capacitor bank, but after two weeks of testing and trying different suggestions, he was at a dead end. He had considered disconnecting the capacitors permanently, but that would result in a utility company penalty of $10,000 each month for an unacceptable system power factor.

Joe remembered that he would be attending a training seminar 100 miles north of Fort Beetle Bailey next week, and he could drive down after class to take a look at the problem. If he solved the sparking problem, John would buy him a steak dinner.

The following week Joe drove down to see his buddy. After 30 minutes of looking the system over, he said, "I can solve your problem with a pair of bolt cutters." Once he realized that Joe was not kidding, John walked over to the maintenance truck and got the cutters. Joe then walked to the capacitor bank and cut a cable that went into the dirt and told John to energize the capacitor bank.

After the bank was energized, the power factor hovered at a solid 0.95 without any ill effects in the switchgear controls. John grinned and shook his head saying, "Bolt cutters!"

Joe explained that he believed that the public utility electrical system characteristics had probably changed recently, most likely due to the addition of a reactor or some harmonic producing equipment installed up-the-line. This could have caused a higher current due to a resonant condition on the system where currents were circulating between the grounded wye connection at the capacitors and the system ground at the substation transformer. This, in turn, could have resulted in interference to the relay and control system.

Solutions to this type of problem usually include de-tuning the circuit (removing some capacitors or adding inductive reactance) or using bolt cutters. Here, bolt cutters were used to sever the wye connected ground at the capacitor bank. It is important to note that wye connected capacitor banks should be ungrounded to eliminate a path for zero sequence harmonics that could flow through the neutral circuit.

"Now let's see about that steak," said Joe smiling.

POC is Ron Mundt, (703) 704-2763, e-mail: ronald.k.mundt@smo01.usace.army.mil

Ron Mundt is an electrical engineer in the Special Missions Office of the Military Programs Directorate. **PWD**

SWD-ISO helps Fort Sill eliminate power outages

by Tom Luu

Tom Luu

The U.S. Army Corps of Engineers, Southwestern Division, Installation Support Office (SWD-ISO) in Dallas, Texas, recently provided technical support to the Directorate of Public Works (DPW), Fort Sill, Oklahoma, in evaluating their power distribution system.

Fort Sill had been experiencing widespread power outages during storms and temporary faults that tripped the main substation circuit breakers instead of downstream intermediate fuses. The frequency of power outages caused problems for Fort Sill maintenance personnel. DPW electric shop maintenance personnel had to reset the main substation circuit breakers frequently during thunderstorms and other non-event times at odd hours in order to bring power back to their customers. Maintenance personnel had difficult pinpointing the cause of the primary circuit breaker tripping numerous times.

SWD personnel met with the DPW and subsequently surveyed the Fort Sill power distribution system, including the main electric substation. The field survey was conducted at the end September 2001 and the project (Preliminary Main Substation Relay Coordination Study) was completed at the beginning of December. In-house resources were used for the study.

After the survey, it was recommend- ➤

USACE, ASHRAE partner for HVAC improvement

The American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE) recently entered into its first collaborative agreement with a government agency. On September 4, 2001, ASHRAE President Bill Coad and Chief of Engineers LTG General Robert B. Flowers signed a memorandum of understanding (MOU) intended to serve the missions and address the needs of both ASHRAE and the US Army Corps of Engineers (USACE).

Also attending the signing for HQ USACE were Harry Goradia (HQ USACE)and Dwight Beranek, Chief, Engineering and Construction Division, (HQ USACE).

The MOU recognizes the unique status of both ASHRAE and USACE in the construction industry. The agreement enables sharing technical advances and research and development as well as the professional advancement of USACE mechanical engineering personnel.

Under the terms of the agreement, both organizations agree to work together to improve heating, ventilating, air-conditioning, and refrigeration (HVAC&R) technologies and their application. ASHRAE and the USACE are committed to the following goals:

- Ensure a commitment to continuing communication between USACE and ASHRAE at all levels to provide mutual briefings on USACE and ASHRAE activities and programs at ASHRAE meetings, and at USACE meetings and conferences.
- Cooperate in the areas of research and development, standards development and application, and in technology transfer. This includes identification of research projects of mutual interest and possibilities for funding, and promotion of the use of publicly developed consensus standards for design and testing.
- Provide mutual assistance in areas of education and training to increase the effectiveness and efficiency of HVAC&R technologies.
- Promote energy efficiency, environmental stewardship, and improved indoor environmental quality in the built environment.
- Advance engineering and technical professional development through the active participation of USACE personnel as members in professional technical engineering organizations at the local and national levels, especially as members of technical committees and in the development of technical and engineering standards.

(L to R) Martin Weiland (ASHRAE), Carlos R. Miro (ASHRAE), Frank M. Coda (ASHRAE), William Coad (President, ASHRAE), LTG Bob Flowers (Chief of Engineers), Dwight Beranek (HQ USACE), and Harry Goradia (HQ USACE). *Photo by F. T Eyre*

The MOU is the first tangible byproduct of the expanded mission of the Society's Government Affairs Department, tasked to identify, explore and initiate collaborative opportunities between the Society and governmental bodies in North America. These public-private partnerships help to create new channels for the sales of ASHRAE products and services, expand the sources of funding for ASHRAE research and activities, and create added value for members in ASHRAE.

Founded in 1894, ASHRAE handbooks are already used extensively by USACE designers. This organization is responsible for developing more than 100 technical standards and by participating in ASHRAE technical committees, the Corps can contribute to and influence the standards used not only by the Corps but throughout the construction industry.

One outcome of the new relationship with USACE has been the development of an innovative program designed to increase attendance at Society meetings. Beginning with the Winter Meeting in Atlantic City, those who register for the Society's 2002 Annual or Winter meetings by paying the advance non-member registration fee receive a gratis membership with full benefits for one year. The program is available to any federal government employee who is not currently a member of ASHRAE, but may be expanded to others in the future.

(Based in part on an article by Carlos Miro in the ASHRAE Journal, October 2001.) PWD

(continued from previous page)

ed that the DPW contract for a complete base wide electrical distribution coordination study. Since a such a study would take months to be completed, SWD-ISO offered to perform the preliminary substation coordination study for Fort Sill to solve existing immediate problems.

The study provided short circuit calculations at the major points in the primary distribution system. This will ensure that all over current protective devices such as the primary substation circuit breakers and fused switches will operate safely to interrupt the short circuit current and provide over current protection.

Recommendations were provided for the primary substation circuit breakers relay trip settings. This analysis was based upon the largest connected loads on each of eight primary circuits, that is distribution feeders and transformers larger than 750 KVA. The recommended trip settings will provide a selective operation and adequate protection for the existing exterior electrical distribution system. Selective operation means only the upstream device of each fault will immediately open to clear the fault, thus limiting the outage to the smallest possible part of the system.

Short circuit and protection coordination analysis is part of the technical supports Southwestern Division Installation Support Office has provided to their customers. In the past two years, SWD-ISO has assisted Fort Sill, Fort Hood and Fort Gordon with analysis of their exterior electrical distribution systems.

POC is Tom Luu, (214) 767-2387, e-mail: thomas.luu@swd02.usace.army.mil

Tom Luu is an electrical engineer in the Installation Support Office of the Southwestern Division, Dallas, TX. PWD

Developing and maintaining successful Restoration Advisory Boards

by Curt Williams

In 1994, the Army established Restoration Advisory Boards (RABs) to allow nearby residents to provide input to installation environmental restoration programs. Since then, the Army has developed a number of common fundamentals and initiatives to maintain the effective and proactive RABs many installations have today.

The initial effort primarily focused on developing working relationships and dialog among installations, federal and state regulators, private citizens and special interest groups regarding the entire restoration process. Today, hundreds of working RABs exist throughout Department of Defense facilities. They are actively engaged in communicating, coordinating and partnering to arrive at mutual consensus to bring individual clean-up sites to closure.

The following ideas have, in varying combinations, helped different installations and facilities maintain functional, energized RABs, targeted to keep the regulatory and private community informed and part of the overall solution:

1. In the initial development of a working RAB membership board, enlist an unbiased third party review board, to advertise, screen, assemble and offer to the installation potential community candidates, in the selection process. Be sure to include Federal and/or State regulators as well.
2. Establish a set date and time when meetings will convene, and hold fast to a set meeting length. Use an agenda to assist in maintaining set times.
3. Use local radio and TV stations, newspapers, local periodicals, RAB newsletters and other sources to inform the local community of the meeting date, time, and location. To encourage participation and maximum attendance, run the announcement the week prior and during the week of the meeting. Call each RAB member prior to the meeting day.
4. Establish a newsletter or update (for RABs that meet bi-monthly or quarterly) that contains a brief restoration project status. Reserve a special corner within the update to briefly discuss any issues the state regulatory community may have or is involved with at the installation, and include points of contact to answer questions or requests for more information. Additionally, create and mail a postcard to all attendees (entitled "Save a Date") that may be conveniently posted by the invitee to serve as a reminder of the date, time, location and list of topics and issues to be discussed.
5. Address other environmental activities on the installation beyond restoration (i.e., cultural or natural resources, waste management, water quality, P2 initiatives, etc.) in the RAB publication. This keeps the public and community proactively informed.
6. Establish a full-time, dedicated community relations and outreach position as part of the installation restoration team. That person will be responsible for choreographing meetings, newsletters, outreach efforts and other associated RAB activities.
7. Alternate meeting locations by convening in accessible public facilities as well as on the installation. (Many RABs now meet solely at public facilities).
8. Conduct annual open house forums at the installation and community facilities to display the relationship between the Installation Restoration Program (IRP), the RAB and clean-up sites. Invite and encourage RAB members to volunteer to work in a booth alongside the IRP staff, to entertain questions and collectively work as a team. This helps to promote ownership and keeps everyone involved and informed.
9. Create and disseminate an information packet that contains background information on RABs membership applications, newsletters, fact sheets, and point of contact information.
10. Create a brochure (fold-out, one page) containing abbreviated information from the packet described above that may be used by RAB members and left at public information areas within neighboring communities.
11. Compile a comprehensive mailing list to keep the community informed and collect feedback. Mailing lists for newsletters or updates are key to RAB success, and require in-depth research to guarantee completeness. Here's a sample list of titles for recipients:
    - Both U.S. Senators for the state
    - U.S. Congress members (from bordering districts only)
    - State governor's office
    - District county commissioners
    - City managers, mayors and city council members
    - Editors of local newspapers
    - News directors of local TV channels and radio stations
    - Presidents of chambers of commerce
    - RAB members
    - Federal and state regulators (including the Environmental Protection Agency Federal Facility Coordinator)
    - US Corps of Engineer support districts and divisions
    - Special Interest groups and organizations (tribal, labor, civic, etc.)
    - Private individuals (those who have expressed interest)

- Presidents of local colleges and universities
- Select installation staff (installation or garrison commander, public affairs, staff judge advocate etc.)
- Owners of local real estate agencies
- Major Army commands, sub-commands, Regional Support Centers, National Guard Adjutant General's Office
- Local redevelopment boards
- Environmental justice groups
- Others peculiar to the area and location.

12. Create a RAB website containing minutes of past meetings, newsletters, upcoming events, next meeting information, a list of RAB members, a membership application, and brief summary of IRP sites, to include a write-in option for comments and questions.
13. Conduct annual visits to all clean-up sites with new and old RAB members to demonstrate progress and re-familiarization, including periodic bus tour visits by interested community members.
14. Establish a centralized public repository (i.e., library on-post and off-post) that enables the community to access information regarding IRP activities and to stay informed of past work, future plans, and the standard time of the month for RAB meetings.
15. Establish a handbook for RAB members. This should contain the charter by-laws, rules and guidelines, interagency agreement w/EPA and/or state, RAB member biographies/photographs, project manager contact information, and provides a mechanism to contain meeting minutes, agendas and handouts.
16. Establish a living, flexible Community Involvement Plan (CIP) to support the opportunity for the surrounding community to participate in decisions that affect their neighborhoods. The CIP has a twofold purpose: First, it allows the community to openly communicate with the Army, state, and other stakeholders regarding the IRP. Second, it outlines the means for sharing knowledge and information.
17. Invite the civilian co-chair of the RAB to attend the annual Installation Action Plan (IAP) meeting to voice RAB concerns. The co-chair may then report to all RAB members the issues discussed, such as scheduling of sites, relative risk prioritization and budget.
18. Encourage the RAB members to review and comment on IRP-related documents and associated permits.
19. Include state regulators (as members of the RAB) in the Relative Risk Evaluation (High, Medium, Low) process of prioritizing cleanup sites and encourage them to participate. This enhances buy-in and regulatory support.

The above suggestions are by no means all-inclusive, and certainly would not fit every installation's scenario. Practices incorporated into the operations of individual RABs naturally must be tailored to the specific issues and the needs of the community. These items are intended to serve as a useful menu of tips for keeping existing RABs alive, energized and functional as well as ideas for those starting new RABs.

For additional information regarding the items listed above, you may contact the following subject matter experts who contributed in helping to assemble this menu:

Susan Galentine-Ketchum,
Fort Carson, CO…… ....(719) 527-4871

Carol Fittro,
Fort Riley, KS .....(785) 239-8662

Melody McElwee,
Fort Campbell, KY .....(270) 798-9641

The Environmental Protection Agency (EPA), through the Federal Facilities Restoration & Reuse Office, has published a number of informational guidance manuals available to facilities interested in establishing a RAB. One manual of particular interest is the "Final Report of Federal Facilities Environmental Restoration Dialogue Committee," dated April 1996. It may be obtained by dialing (202) 260-2457. Additionally, EPA has two websites which address key areas of interest:
Community Involvement:
http//www.epa.gov/swerffrr/communinvolve/fferdc.htm
Partnerships: http://www.epa.gov/swerffrr/partner.htm

POC is Curt Williams, (303) 289-0455.

Curt Williams is a contributing writer at the Army Environmental Center in Aberdeen, MD. **PWD**

Call for Articles

The May/June 2002 issue of the *Public Works Digest* will feature the **Environment**.
Please e-mail all articles to alex.k.stakhiv@hq02.usace.army.mil no later than April 26.

Fort Drum directorates work together to build environmentally-friendly live fire facility

by Karen J. Freeman

Military installations are continually faced with the challenge to remain compliant with Federal and State regulations while at the same time enhancing and supporting the installation's mission. At Fort Drum, a successful, cooperative partnership between the Environmental Division (Public Works Directorate) and Combat Readiness Training Division (CRTD, Readiness Business Center Directorate) has served to provide resources that meet the training goals of the 10th Mountain Division while also minimizing adverse impacts to the environment.

When an existing live fire "tire house" on Range 33 had reached its life cycle, Al Schwark, Chief of the CRDT, explored other bullet trap options that would not only meet the same training requirements and safety standards of the tire house, but would also be less harmful to the environment and reduce the amount of hazardous waste generated by Fort Drum.

Schwark and Jim Haynes, Chief of the Environmental Division, developed a project, under the Environmental Division's Pollution Prevention Program, to replace the tire house with a facility built with Shock-Absorbing Concrete (SACON), an environmentally-friendly product developed by the Structures Laboratory at the U.S. Army Engineer Research and Development Center. In addition to being earth-friendly, the SACON "shoot house" offers a high level of safety and provides Fort Drum soldiers with a facility in which they can conduct year-round live fire training under simulated combat conditions in an urban/restrictive terrain environment.

Although other military installations have used SACON to form safety walls behind small arms firing ranges, Fort Drum is one of, if not the first, to use the material to build an entire shoot house.

Before deciding on SACON, Schwark and Haynes evaluated numerous bullet trap alternatives, including rubber blocks, sand filled walls, and MATCH (Modular Armored Tactical Combat House) construction. Fort Drum also considered rebuilding the tire house, which adequately served the training purpose, but also posed numerous environmental concerns.

SACON blocks form the walls of the new shoot house at Fort Drum.

"There were advantages and disadvantages to every bullet trap we investigated," said Schwark. "In fact, the SACON facility incurred higher initial costs than other options. However, the trade-offs in terms of environmental preference, training safety and training enhancements made choosing the SACON material an easy decision."

SACON was originally developed to reduce the incidence of ricochets during urban training exercises by 'capturing' bullets, explained Schwark. Low water permeability combined with the high alkalinity of the concrete would then encapsulate the lead and create a less soluble lead corrosion product, which ultimately reduces the leaching of lead into surrounding soil and groundwater.

The end result? A bullet trap containing lead ammunition that can be safely disposed of as non-hazardous solid waste in a landfill rather than disposed as costly and environmentally-harmful hazardous waste.

The new shoot house is a maze of six interconnected rooms and two hallways with four entry points. An elevated catwalk along the perimeter permits observation by safety officers and unit commanders. A roof covering the entire structure allows for year-round training.

Since it opened in November of last year, Schwark has heard nothing but positive comments about the new shoot house. "The squads like the design and layout of the building and the commanders appreciate the catwalk so they can better critique training and evaluate training methods," Schwark said.

"We use the shoot house for urban combat exercises such as entering and clearing rooms and the flexibility to design different scenarios is great," said CPT Antonio Paz, former commander of the 4th Battalion, 31st Infantry's B Company, the first unit to train in the SACON structure. "The new shoot house is definitely more realistic than the tire house."

With the SACON shoot house meeting and exceeding all expectations, Schwark and Haynes are looking at other applications for SACON on Fort Drum's small arms ranges. Plans are already in place to use SACON material as a backstop, retaining wall and separation wall on various ranges on Fort Drum. With its ability to be shaped into different forms and colors, SACON offers unlimited potential for use as coffins for pop-up targets and simulated training obstacles such as logs, stumps and rocks.

"Mr. Haynes and I share ideas for what types of bullet traps can meet the training needs of the 10th Mountain Division, while at the same time, lessen adverse effects on the environment," said Schwark. "If we identify bullet trap technology that helps the Army meet its goals to reduce hazardous waste and pollutants, Mr. Haynes is more than willing to assist with these range projects."

In this case, the Environmental Division allocated $56,900 in funding to dismantle, remove and recycle the tire house. The Environmental Division also ➤

ACSIM issues policy on Migratory Bird Treaty Act

by Malcolm E. McLeod

On 7 August 2001, the Director, Environmental Programs of the Assistant Chief Of Staff For Installation Management, issued a memorandum, titled "Army Policy Guidance on Migratory Bird Treaty Act" (MBTA), directing MACOMs to ensure that installations comply with the requirements of the Act. The guidance defines intentional and unintentional take (DOI defines "take" to mean "pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect") and requires installations to:.

For ***intentional take***, which essentially relates to actions taken specifically to collect or control any bird species covered by the act, installations should:

(1) Apply for and obtain a depredation, special purpose, or scientific collection and education permit or other regulatory authorization from the USFWS *{prior}* to taking action(s) and

(2) Record any birds purposefully and intentionally taken under the permit and provide an annual report.

For ***unintentional take***, installations should comply with the guidance.

For actions taken for other purposes, but which ***may*** affect a migratory bird species *(unintentional take)*:

(1) Consider and seek to minimize impacts of management activities on migratory birds in the Integrated Natural Resource Management Plan. However, specific inclusion of migratory birds in an INRMP shall not impede progress to complete the INRMP by 18 November 2001 as legally mandated in the Sikes Act Improvement Amendments.

(2) Consider the effects to migratory birds in any proposed actions and address the effects, mitigation and public comment through National Environmental Policy Act documentation.

In general, all unintentional take effects of normal mission activities should have been a part of the installation's INRMP, which is, by definition, coordinated in advance with the U.S. Fish and Wildlife Service. For example, all forestry actions will have effects on nesting habitat and other types of issues. Installation land management planners and schedulers should take the possibility of adverse effects on the bird species, and others into consideration when planning harvests, etc. Another example would be mowing of grassland areas during vulnerable periods for certain birds. Most installations do take the possibility of adverse effects into account already. So installation foresters or land management staff don't plan to take birds, but do plan to take actions which may/will affect birds depending on when and how the actions take place.

The guidance also provided copies of the DOD memorandum "Applicability of the Migratory Bird Treaty Act to Federal Agencies," Department of interior Director's Order No. 131 "Applicability of the Migratory Bird Treaty Act to Federal Agencies and the Requirement for Permits", and E.O 3186 "Responsibilities of Federal Agencies To Protect Migratory Birds," which confirm the requirement for Army compliance and provide further guidances.

The Army Staff POC for this policy memorandum and actions relating to the Migratory Bird Treaty Act and endangered species issues is Bill Woodson, (703) 693-0680. The Army Environmental Center technical POC is Scott Belfit, (410) 436-1556. For assistance with MBTA compliance, please contact Dr. Hal Balbach at the Corps of Engineers' Engineer Research and Development Center, CERL, Champaign, IL, at (217) 373-6785, e-mail: hal.e.balbach@erdc.usace.army.mil.

Malcolm E. McLeod is a chemical engineer at HQUSACE, Environmental Division, Environmental Support Branch. PWD

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funded $433,000 for the design and construction of the new shoot house with the SACON material. The roof and catwalk were funded by the Readiness Business Center at costs of $86,300 and $61,000 respectively.

As weapons and systems change, Fort Drum must constantly meet new standards in training areas. The environmental impact of these changes is substantial and long-term vision is required to effectively manage the land required by training while keeping Fort Drum in regulatory compliance. The team approach taken by Haynes and Schwark expedites project development. Information and technical expertise from all programs are shared and innovative ideas are developed, all of which help the CRTD and the Environmental Division to serve and enhance Fort Drum's training mission.

"It's truly a win-win situation," said Haynes. "The 10th Mountain Division has the training lands and tools in place that they require for a realistic training environment. At the same time, Fort Drum is able to reduce the amount of hazardous waste generated and the cost of disposing it, as well as minimize harmful impacts to the earth's natural resources."

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Karen J. Freeman is a Community Relations Specialist, Dynamac Corporation, in the Environmental Division, Public Works, at Fort Drum. NY. PWD

Reduction, reuse and recycling of demolition waste

by Malcolm E. McLeod

The principles of Environmental Sustainability take into account the overall impact of a facility on the environment, potential change in use of a facility, and the final disposal or reuse of that facility. Unfortunately, most of the structures that we currently have to deal with, which have reached the end of their useful life, were not constructed with sustainability in mind.

AR 420-49 establishes policy for efficient and economical solid waste management. Section 3.6.d states "Construction and demolition debris should be recycled when possible." The ACSIM memorandum, Management of Construction and Demolition (C&D) Wastes, 31 August 2001, provides additional guidance.

C&D debris accounts for an estimated 35-40 percent of the municipal solid waste stream. Disposal of debris is both economically and environmentally costly. Landfilling debris unnecessarily wastes both natural resources and valuable landfilling space.

Alternatives to conventional demolition and landfilling wastes have proven to:

- Reduce solid waste volume.
- Avoid costs for landfill tipping fees.
- Provide a source of revenue from the sale or reuse of building materials.

In addition, the effective recycling or reuse of a facility promotes compliance with E.O. 13101 (Greening the Government Through Waste Prevention, Recycling and Federal Acquisition). Reaching the current DOD Measure of Merit (MoM) goal of a 40 percent landfill diversion rate by the end of 2005 will also require installations to more aggressively pursue C&D recycling/reuse.

Recent U.S. Army Construction Engineering Research Laboratory work with several Army installations indicates that there are a number of alternatives to simple disposal of C&D debris. With appropriate planning, unexpected project delays can be avoided.

In addition to landfill avoidance, the reuse or resale of C&D debris can be cost competitive with other disposal methods or may even be a moneymaker. To assist engineers and environmental personnel in this planning process, USACE has recently published technical guidance as PWTB 420-49-32 (Selection of Methods for the Reduction, Reuse, and Recycling of Demolition Waste). Outlined in this PWTB are demolition, recovery, recycling, and deconstruction techniques for more efficient landfilling practices and resource utilization. Project objectives and conditions for which each of these methods is economical and practically viable are also covered.

A mess hall at Fort McCoy under "deconstruction" by private citizens.

A mothballed production building at Badger AAP has potential for reuse of its timbers.

An interactive matrix contains information to assist personnel at Army installations in determining the appropriate strategy for diversion of C&D debris from landfills. Tables in the PWTB list parameters (Objectives and Conditions) associated with the methods for disposing of demolition waste (Demolish, Recycle, Recover, and Deconstruct). In electronic form, each element of the matrices is hyperlinked to its associated text paragraph for easy document browsing.

PWTB 420-49-32 is now available on the Corps Engineering and Support Center (Huntsville) Techinfo Website (http://www.hnd.usace.army. mil/techinfo/CPW/pwtb.htm). The HQUSACE proponent for this PWTB is Malcolm E. McLeod, CEMP-RI, malcolm.e.mcleod@usace.army.mil.

Further technical information and assistance can be obtained from the USACERL POC, Stephen D. Cosper, CEERD-CN-E, (217) 398-5569, cosper@cecer.army.mil. Policy direction and interpretation can be obtained from the ACSIM (DAIM-FDF-EU) POC, William F. Eng, (703) 428-7078, DSN 328-7078, e-mail: william.eng@hqda.army.mil. PWD

Help for recyclers

by Malcolm E. McLeod

Many Army installations are actively engaged in recycling municipal solid waste and construction and demolition debris. Markets for the various recyclables fluctuate widely and installations are frequently scurrying to maximize their returns from recyclable sales, not an easy task in times of economic slowdown. Towards this end, many installations have decided to sell their materials directly through the Qualified Recycling Program rather than through the DRMS/DRMO.

DODI 4715 4 authorizes installation commanders, as appropriate, to sell directly recyclable "recyclables" and other qualified recycling program materials (subject to major command approval), or to consign them to the DRMS for sale. AR 420-49 encourages installations to use the direct sales authority provided for in current DA policy:

Installations may sell their recyclables directly rather than through the DRMS/DRMO if (a) Direct sales is expected to result in increased proceeds, net of cost, increased efficiency or cost effectiveness or (b) The sale of the material will result in the direct return of a usable product containing that material.

USACE has published a technical document (PWTB 420-49-18, Direct Sales of Recyclables) to assist in sales contracting and marketing of recyclables. In addition to general information on recycling, the PWTB explains the policies and procedures of marketing recyclable materials directly to the private sector.

Brass fired at Fort Knox is brought to the recycling center.

PWTB 420-49-18 discusses recycling collection, processing, and marketing and gives sample contract language. It also includes a number of Appendices with useful information such as:

- A sample invitation for bid for spot sales of recyclables.
- A sample request for proposals.
- A sample term contract.
- A sample performance work statement for recycling collections.
- Points of contacts for recycling organizations.
- A list of relevant recycling-related publications
- Other useful recycling information.

PWTB 420-49-30 was prepared by the Corps' Construction Engineering Research Laboratory and is now available on the Corps Engineering and Support Center (Huntsville) Techinfo Website: http://www.hnd.usace.army.mil/techinfo/CPW/pwtb.htm.

The HQUSACE proponent for this PWTB is Malcolm E. McLeod, CEMP-RI, malcolm.e.mcleod@usace.army.mil. Further technical information and assistance can be obtained from the USACERL POC, Stephen D. Cosper, CEERD-CN-E, (217) 398-5569, cosper@cecer.army.mil. PWD

Recycling center at Fort Knox.

Stopping pollution cold

by Marshall Hudson

Fort Detrick, located 45 miles west of Baltimore, is home to the Army Medical Command. As part of the ongoing environmental cleanup of the post, the Baltimore District is preparing to pump chilled salt water under and around disposal pit one at Fort Detrick's Area B. Lots and lots of very cold salt water.

The pit, located on the post's Area B-11, just outside Frederick, Maryland, is one of four that will be excavated to prevent its contents from leeching into the ground. "The idea is to get the ground so cold, it will create a barrier of frozen earth," said Clint Kneten, construction representative.

"By completely freezing the dirt around and under the pit, we're making sure that we capture and contain everything that was buried. Even if drums or other containers break open during removal, no contaminates will leak into the ground water," he said.

The $18 million pipe system will go as low as 35 feet below ground to completely encircle the pit. About 35,000 gallons of water will be needed and piped in from over a mile away every day to maintain the cooling system.

"This isn't a new technology, but we are applying it in a very innovative way here," said Brent Graybill, environmental protection specialist. "It is just one of a number of extraordinary environmental precautions we are taking."

Records, test trenches and soil gas surveys all indicate that the four pits contain laboratory chemicals and materials.

"Since incompatible chemicals were buried together, we must be prepared for any type of reaction during excavation, said Tom Meyer, project manager. "Our commitment to public safety has led us to use the highest safety measures."

"Safety, both for the nearby residents, and for the workers, is the highest priority at the site," he said.

Precautions for the workers include the rare mandatory use of level A protection, known as moon suits. The suits are decontaminated every time the workers leave the immediate work area.

Other precautions include remote video monitoring of the site activities and explosive barriers. The glass window on the backhoe has been replaced with a Plexiglas blast shield.

Some area residents live about 100 yards away, and a major housing complex is less than two miles from the site, so the safety precaution of a temporary containment structure is being used over the pits.

The containment structure, which was also used during the delineation phase while the test trenches were being dug, controls air quality with a carbon filtration system.

The system filters the air using giant fans and air intakes, making sure that no particles that might be disturbed during excavation are allowed to escape.

There is an additional foaming system present to extinguish any fires or knock down any particulates that rise into the air.

All the material removed from the pits will be identified and sorted inside the structure before being removed to an incinerator or appropriate landfill.

The removal of contaminants from Pit 1 should be completed by next April. The other three pits in area B-11 are expected to be finished in two years.

Workers drill underneath pit one and install the freeze pipes.

Freeze pipes encircle pit one.

Photos by Marshall Hudson

The cleanup is a multi-agency, state and federal partnership that includes the installation, the Corps, the Army Environmental Center, the Environmental Protection Agency and the Maryland Department of the Environment.

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Marshall Hudson is a public affairs specialist in the Baltimore District Public Affairs Office. PWD

Interactive computer program offers help with 1391s

by Garry Runyans

We all know that the Department of Defense uses the DD Form 1391 to submit to Congress requirements and justifications in support of funding requests for military construction. But how many of you are aware of the DD Form 1391 Processor System? It can assist you in preparing, submitting, reviewing, correcting, printing, and archiving those dreaded 1391s in accordance with AR 415-15, "Military Construction, Army Program Development."

The system, developed by the Construction Engineering Research Laboratory in Champaign, Illinois, was initially fielded by the Huntsville Center in 1980 and has since undergone extensive modifications and enhancements. In March 1999, the Huntsville Center fielded a web-based version of the DD1391 Processor System.

Today's interactive DD Form 1391 Processor System accommodates projects for the following major programs:

- Military Construction, Army (MCA)
- Production Base Support (PBS)
- Army Family Housing (AFH)
- Non-Appropriated Funds (NAF)
- Maintenance and Repair (M&R)
- Army and Air Force Exchange Service (AAFES)
- Medical Facilities (MED)
- Defense Finance and Accounting Service (DFAS)
- Payment-In-Kind (PIK)
- Defense Logistics Agency (DLA)
- Commercially-Financed Facilities (CFF)
- Base Closure, Army (BCA)
- Special Operations Program (SOP)
- Section 6 Schools (S6S)
- Shared Energy Savings (SES)
- Chemical Demilitarization (ChemD)
- Ballistic Missile Defense Organization (BMDO)
- National Missile Defense (NMD)
- Theater Missile Defense (TMD
- Relocatable Buildings (RB).

As the Assigned Responsible Agency (ARA) for the system, the US Army Engineering and Support Center, Huntsville, provides fielding, operation, enhancements, maintenance, documentation, hotline assistance, and training to customers worldwide. System users cover a broad spectrum of unique needs and requirements associated with policies and procedures governing the 1391 and related documentation. Customers supported by the system include Army installations, major subordinate commands (MSCs), major commands (MACOMs), USACE Districts and Divisions, USACE, HQDA, and DoD personnel involved in military construction.

The system offers computerized assistance to identify, quantify and justify military construction worldwide by generating project supporting data, including cost estimates, project requirement, and deficiency data. 1391 forms are automatically distributed to the appropriate MSC/MACOM, process manager, and the U.S. Army Corps of Engineer District and Division.

As a project proceeds through review channels, the system automatically keeps track of its status. This allows the user to monitor the project and see any modifications as well as determine its exact location at any time during the Military Construction Planning and Programming process. Users can also review comments made by various offices as the project is submitted and/or returned for correction by higher headquarters.

There are three Windows-based software programs currently available for three Tabs of the DD1391 Form:

- PC-Cost is a cost estimating package developed for Tab A (and for the ENG3086 Form).
- ECONPACK is an economic analysis package developed for Tab D, but utilized by all Services.
- ISCE is an information systems cost estimating package developed for Tab F.

A history of all form submittals and returns is automatically maintained by the system, and this information is accessible to users so they can monitor changes made to each field of data once a form is submitted to higher headquarters. To further sharing information, there is controlled access to projects being programmed by other activities. Thus with the approval of 1391 creator, another user may "read" a copy of the form electronically.

Multiple data retrieval procedures generate listings of project information in many different formats. To assist technical reviewers at all organizational levels, the system can print the forms in the formal Congressional Budget Book format as well as in other formats.

All system users may access the directory of archived forms, which contains 1391 projects that have been successful in the programming and planning process.

The system can also help with the preparation, review and printing of DD1390 Forms in accordance with AR 415-15, Military Construction, Army Program Development. This form is used by the Department of Defense to submit to Congress a consolidation of the Military Construction Program in relation to personnel strengths, real property, real property improvements, and the installation mission and functions. Preparation and/or modification of DD1390 Forms can be made with minimal effort since much of the supporting data is automatically extracted from other automated systems. These include the DD Form 1391 Processor System, the Construction Appropriations Programming Control and Execution System (CAPCES), the Headquarters, Integrated Facility System (H IFS) and the Army Stationing and Installations Plan (ASIP).

For the latest guidance and information concerning the DD Form 1391 Processor System, there is an on-line newsletter. While the system currently maintains over 25,000 forms, it completes and ➤

ECONPACK makes economic analysis easy

by Mike Rice

ECONPACK, version 2.1.2, is an economic (cost-effective) analysis computer package available to personnel throughout the Department of Defense and the government. The ECONPACK system incorporates economic analysis calculations, documentation, and custom reporting capabilities in support of military construction (MILCON) and MILCON-related programs, and other programs such as information management systems, resource management, other procurement, and capital investments.

Initially designed for non-economists at U.S. Army Corps of Engineers Directorate of Engineering and Housing activities at installations and field operating activities, the program is now used by many other government activities. There are currently over 1,500 users.

Developed by the US Army Corps of Engineers, Pacific Ocean Division, and the Construction Engineering Research Laboratory under the sponsorship of HQUSACE, ECONPACK has been managed by the US Army Engineering and Support Center, Huntsville since 1985.

ECONPACK includes the capability to upload/download files to/from the DD Form 1391 Processor application, which is located on the U.S. Army Corps of Engineers' Programming Administration and Execution (PAX) computer system. This interchange capability enables analysts to develop economic analyses in ECONPACK on their personal computers and upload input files to an electronic DD Form 1391 located on a central system.

Sensitivity analysis features and graphics capabilities are included in the ECONPACK program, which performs standardized life-cycle cost calculations such as net present value, savings-to-investment ratio, benefit-to-investment ratio and discounted payback period. Text entry is permitted for assumptions, alternative definitions, cost derivations, non-monetary costs and benefits, and results and recommendations. The program's output reports conform to current DOD Guidance and can be customized according to user preferences.

Your hardware/software must meet the following requirements to support access and use of ECONPACK:

- IBM Compatible Personal Computer (Pentium or greater, 166 Mhz CPU, CD-Rom)
- Microsoft Mouse or compatible pointing device
- 30 (or higher) Megabytes of RAM
- 25 Megabytes of hard disk space
- VGA or SVGA Monitor
- 28.8 Baud (or higher) Hayes Compatible Modem or Internet Access
- Microsoft Windows 95 (Build 708 or higher), 98, 2000, or NT 4.0 (build 1391 & service pack 3 or higher)

Mike Rice

- HP or Compatible Laser Printer-Screen Resolution of 800x600 or higher

ECONPACK interfaces with Tab D (Economic Analysis) in the PAX/DD1391 Form Processor System. It is available to government personnel only and can be downloaded from the following website: www.hnd.usace.army.mil/paxspt

New versions of ECONPACK will be fielded as requirements are developed.

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Mike Rice is the PAX Program Manager in the Installation Support Division at Headquarters. PWD

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archives about 200 forms annually. Currently, there are about 1,000 individual users worldwide utilizing 450 PAX System IDs.

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Garry Runyans is the DD1391 Processor System Administrator at CEHNC-ED-ES-A. PWD

For an electronic copy of the latest Digest, go to http://www.hq.usace.army.mil/isd/ For back issues, click on publications.

Calculate with PC-Cost

by Mike Rice

PC-Cost is a cost-estimating software program which assists in preparing detailed design cost estimates for Military Construction projects. It prepares estimates in an electronic format compatible with the DD1391 and ENG3086 Modules on the Programming Administration and Execution (PAX) System. Use PC-Cost to:

- Perform cost-estimate calculation based on the methodologies described in TM 5-800-4, Programming Cost Estimates for Military Construction.
- Enter, modify and copy information for budget estimates.
- Automatically upload/download data between the ENG3086 and DD1391 Modules and the PC-Cost program.
- Search and retrieve data from the Facilities Cost Guide, Category Codes, Installation Lists, Area Cost Factors, and MCP Indices.
- Apply appropriate adjustment factors to Cost Guide-derived data or to user-entered data.
- Prepare building alteration cost estimates based on the building work breakdown structure (WBS).
- Import data from PACES or MCACES GOLD project estimates and site assembly databases.
- Generate 2- and 3-level reports from budget estimates.
- Perform quick "what ifs" in response to customer's last minute requests.

PC-Cost, version 1.00, was fielded in May 1995, and the current version 4.10 was released in July 2001. The PC-Cost software can be downloaded from within the PAX/DD1391 Processor System.

PC-Cost offers its users an MCACES Gold and a PACES import option to allow for more detailed cost estimates. The ultimate goal for PC-Cost is to export the cost estimate into either an ENG3086 or a DD1391 Form.

New versions of PC-COST will be fielded as requirements are developed. Soon, users should be able to interface with a modified version of PC-Cost while editing Tab A of the DD1391 Form or the ENG 3086 Form.

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PWD

REEP Version 5.2 released

by Eileen Westervelt

Army Installation Energy Managers can get help deciding where to focus their conservation efforts and meet their facilities audit requirement with CERL's updated REEP (Renewables and Energy Efficiency Planning) software. Version 5.2 will be released in March 2001 at CERL's Strategic Energy Planning website: http://www.cecer.army.mil/SEP If it's been a while since you've looked at REEP, it's time to look again. The latest version has a friendlier graphical interface which uses fill-in forms, more on-line help, ESPC and ECIP economic criteria, parametric analysis capabilities, and the ability to save reports in assorted formats.

The REEP program is one of CERL's Integrated Strategic Energy Planning tools for screening and prioritizing energy and water conservation projects in DoD on an installation, multi-installation, or national level. REEP takes a "big picture" approach to steering overall efforts by identifying promising technologies, fuels, and funding mechanisms that merit further investigation; estimating savings targets and magnitude of investment; and identifying when technologies that were not viable in the past should be reconsidered in light of changing conditions. REEP identifies promising technology areas and prioritizes projects based on user-selected criteria such as minimum time to payback, minimum first cost, maximum return on investment, or maximum resource savings. REEP helps resource managers identify where they should concentrate their engineering efforts.

REEP evaluates 104 energy and water efficiency projects for their resource savings potential, financial viability, and pollution abatement potential. REEP's database contains over 200 entries of site-specific information for each of 210 DoD installations describing climate, infrastructure and utilities. This information comes from databases such as HQRADDS and HQEIS, old Red Book entries, and installation personnel. The financial analysis uses life-cycle costing methods, and allows selection of ECIP and ESPC economic filters. REEP requires no input; however, the user can modify most default inputs. It allows parametric analyses, which generate tables of output data based on variable fuel and project costs, and provides a variety of both detailed and summarized report formats.

When input data is fine-tuned to reflect actual site conditions, REEP analyses meets DoD requirements for prioritization surveys and preliminary energy audits to comply with the un-funded Executive Order 13123 to audit 10% of facilities annually according to the DoD Energy Manager's Handbook. This capability could be of significant value to installations and could be the key to productive interactions resulting in the fine-tuning of the input data.

If you don't have time to learn this software, CERL can work with you on a reimbursable basis to gather the information and generate the reports.

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Eileen Westervelt is the REEP Program Manager at CERL in Champaign, IL. PWD

Fort Polk's Annual Work Plan Engine

by Jim Kelley

Installations need real time or point of sale information to support the dynamics of change associated with delivery of safe and serviceable real property and to manage the investment of appropriated funds. We all know that continued outsourcing of government tasks reduces the knowledge base of the remaining organization. Early retirements coupled with routine retirements from an aging workforce result in the loss of key and often critical process knowledge. So what's an installation to do, you ask?

Up to now, no commercial software tools could integrate budget development, point of sale commitment tracking and capture knowledge management information to retain key and critical governmental processes. Enter The Annual Work Plan Engine (*AWPE*).

Developed by the Directorate of Public Works, Business Management Center, at Fort Polk, Louisiana, AWPE assists in managing scarce resources, prioritizing projects, and controlling expenditures. It uses commercial database software to solve important resource compliance needs.

The application compiles a knowledge base of requirements, procedures, regulations and actions needed to accomplish goals on an annual or multi-year basis. Simply put, AWPE is an automated tool for budget development, execution tracking at the point of sale, and knowledge management for real property services.

With linkages to IFS and AR37-100 accounting processes, AWPE tracks activity and service based costs. It has budgeting and project management tools to control and audit expenditures. Allowing for multiple users, AWPE is network ready with a knowledge base engine and client server application. Other outstanding features include availability of unlimited graphical reports and allowing managers to view problem areas immediately.

Minimum requirements for using the system are:

- Microsoft Windows 95, 98SE, NT4.0, Win2000
- Pentium class CPU
- 32 MB Memory
- 10 MB Hard Drive Storage
- CD Rom

Jim Kelley

The potential for any federal agency to benefit from the Annual Work Plan Engine is unlimited. If your installation wants to reduce process, improve internal control compliance, and improve responsiveness while lowering the costs of producing auditable budget, execution and knowledge, then this tool is for you.

For more information about the AWPE, please contact Jim Kelley, (337) 531-1403, e-mail: kelleyj@polk.army.mil

Jim Kelley is the Business Management Leader at Fort Polk's Business Management Center. PWD

LUCs help mitigate contamination risks

by Rik Wiant

Land use controls (LUCs) are remedial actions that include any type of physical, legal, or administrative mechanism that restricts the use of property in accordance with an environmental response conducted under the Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA), or corrective action under the Resource Conservation and Recovery Act (RCRA). LUCs apply to real property that the Army is retaining, as well as that being transferred to other agencies, or sold.

LUCs are used to mitigate risks associated with to exposure to contamination either during or residual to cleanup, instead of eliminating those risks by removing or treating the contaminated media to unrestricted use levels. LUCs are not a new idea - we have often continued to use contaminated areas, as long as we didn't use them in a way that would increase our risk of injury. They are rather a more formalized system of assuring critical information is not lost and mistakes made.

Instructions for managing LUCs have now been published as interim guidance by the Army Environmental Center. You can download from the Planning and Real Property Library.

LUCs are generally established and managed by the installation environmental office, but they have to be enforced by the installation master planner and real property officer. LUCs are entered in the DSERTS database, which makes them visible to the MACOM and HQDA, but not necessarily to installation users. They need to be incorporated into the master plan and be on file in the Real Property Office as well.

The most effective way of assuring that all who need to know are made aware of specific LUCs is to present the information in a GIS layer on the installation enterprise GIS. That will reduce the likelihood of someone planning an incompatible activity within an LUC area. Detailed guidance on the preparation of this layer has not been developed yet. Comments and recommendations on the data content of this layer are particularly appreciated.

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Fort Campbell relies on RAILER to manage track

by Dana Finney

When Audie Hardin needs to know anything about the Fort Campbell, KY, railroad track, he pulls up his RAILER database instead of driving all over the county to look at it.

"The database has every bit of information I need for seeing how the track's condition has been in the past and to project what it will be in the future," said Hardin, Chief of Engineering and Design in Fort Campbell's Public Works Business Center (PWBC). "It gives me hard core, firm data that I can use to leverage my command group and FORSCOM for the dollars we're going to need to make repairs."

RAILER – the Railroad Maintenance Management System – is one of several engineered management systems (EMS) developed by the U.S. Army Engineer Research and Development Center's Construction Engineering Research Laboratory (CERL). It provides managers with a detailed track inventory; inspection, condition, and work history; and a maintenance and repair (M&R) needs assessment, which allows them to develop M&R plans.

EMSs use condition indexes that provide a rating of 0-100, with 0 being failed and 100 free from all visible defects. Based on annual inspection data, the systems produce the condition index rating. These ratings suggest the score at which it is most economical to do M&R projects, which ensures best possible use of limited funds. RAILER also uses the Army Railroad Track Standards for condition assessment. The indexes and track standards provide complementary assessments of both short- and long- term condition trends on which to plan work.

"It tells me where to use the money wisely to get the most bang for my buck," said Hardin.

RAILER includes a geographic information system (GIS) that generates maps matching color codes in the Installation Status Report. These maps show track condition at a glance, giving managers a powerful tool in budget meetings.

Fort Campbell began using RAILER 6 years ago. The PWBC is responsible for some 40 miles of track on- and off-post, which is used to mobilize support equipment for the 101st Airborne Division. According to Shirley Ezell, Traffic Manager in the Readiness Business Center, a unit training deployment requires about 200 rail cars to transport equipment, including humvees, trucks, tankers, wreckers, engineering support, and so on.

"Fort Campbell is a premier power projection platform for deployment. Our marshaling area can hold 900 to 1,000 pieces of rolling stock," said Ezell.

To fully take advantage of all RAILER's features, Hardin taps into resources at CERL and two Corps of Engineers districts, Louisville and Omaha. Track experts at CERL provide inspection, database updates, and M&R planning consultation, while the districts help with the business side.

Louisville can locate contractors to do the repair work and can sometimes secure installation support dollars based on the work that RAILER says is needed. Omaha District provides contracting support. According to Dan Boyer, railroad engineer at Omaha's Transportation Support Center, "We have an indefinite delivery-type contract in place that can be used to support any Army or Air Force installation."

In producing delivery orders, Hardin especially likes RAILER's GIS feature. "I can copy the defect from the database and then generate a map to attach to the delivery order so there's no question what needs to be done – and where," he said. "I can also see where repairs are recurring in the track and zero in on the systemic problems I need to concentrate on." RAILER does this by displaying a wide variety of views focusing on inventory, inspection, condition assessment, M&R planning, and work history.

RAILER also uses hand-held computers and special software called RAILER RED to speed inspections and data entry. A new version is soon to be released and will be beta-tested this spring, said Dr. Don Uzarski, RAILER's developer at CERL.

"With the remote data entry, when your field work is done, your data entry is done, too," said Boyer.

Hardin finds the greatest advantage to using RAILER is in having valid data to prepare Fort Campbell's annual M&R plan. "The benefits to installations of RAILER and the programs like it are tremendous," he said. "I love RAILER – it's a bargain for what we get and how useful it is."

For more information about RAILER, please contact Dr. Don Uzarski at CERL, 217-373-4464 or 800-USA-CERL, d-uzarski@cecer.army.mil.

Dana Finney is the public affairs officer at CERL in Champaign, IL. PWD

Fort Campbell uses RAILER to keep its railroad track ready to move all equipment and supplies for the 101st Airborne Division.

RACER estimates budget costs for ordnance and explosive projects

by Jim Peterson

Developing accurate and consistent cost estimates for projects and their associated phases is a critical step to any organization responsible for budget submissions, contract negotiations, and/or financial decision-making. One of the tools available for developing estimates is the Remedial Action Cost Engineering Requirements (RACER) System.

RACER is a parametric, integrated cost-estimating software system specifically developed for estimating costs associated with environmental remediation projects. It provides a range of cost estimating detail from an order of magnitude in a project's preliminary stages to a refined, detailed definitive estimate at the time of project execution.

RACER was accredited in FY 2001 in accordance with the requirements of DODI 5000.61, *DOD Modeling and Simulation Verification, Validation, and Accreditation (VV&A)*. It is the only budgetary cost-estimating program to be accredited to date.

With the recent high visibility of ordnance and explosive (OE) projects, the U.S. Army Corps of Engineers has developed new RACER OE cost models to enable project and program teams to develop more reasonable and defendable cost estimates for these projects.

Each of these OE models can be coupled with other existing RACER models to develop an estimate for the total project cost. It is very important to note that these models are not static and are frequently updated, as new information becomes available.

RACER OE models include:

Archive Search Report Model.

The ASR model in RACER is used for development of costs in the site inspection phase of many projects. The primary purpose of the ASR is to provide an overall evaluation at a site to differentiate those sites (current or former) that pose a potential threat to public health, welfare, or the environment.

OE Engineering Evaluation/Cost Analysis Model.

The OE EE/CA model is used to estimate the cost to characterize the nature, location, and concentration of Ordnance and Explosives (OE) by providing description of the OE related problems affecting human use of the site; identification and analysis of reasonable risk management alternatives; recommendations for a proposed alternative. The EE/CA process seeks public comments and participation, and documents the process for use in final decision making and judicial review.

Ordnance and Explosive Removal Action Model.

This quantitative model is designed to estimate the costs of searching for, marking, and removing unexploded ordnance (UXO) from munitions contaminated property. The major cost drivers are the area to be cleared, type of topography and vegetation, depth of OE clearance, and the variety and concentration of munitions to be cleared.

Ordnance and Explosive Institutional Controls Model.

This model combines estimates for options of legal controls on land use to limit the public's exposure to OE and passive controls and engineered solutions to limit the public's exposure to OE. Examples of elements in this model include programs to educate individuals about potential exposure risks, response actions, emergency plans, etc.; the legal options available: including controls related to ownership of the land, easements, zoning and siting restrictions, etc.; and engineering controls that limit the public's access to a site.

Ordnance and Explosive Monitoring Model.

This model addresses the cost of site monitoring following the implementation of an OE Removal Action project to assess the effectiveness of the removal.

The Huntsville OE Design Center and the Hazardous, Toxic, and Radioactive Waste Center of Expertise developed the RACER OE models. Their mutual goal is to keep verifying and updating the models using historical data and incorporate user comments.

In addition, research into recently developed innovative technologies and applied engineering solutions will be used to update the models in 2002. These efforts enhance the Corps' ability to continue to estimate defendable budget estimates for OE projects.

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Who's Who at HQ

Brigadier General Carl A. Strock

Director of Military Programs
U.S. Army Corps of Engineers

Brigadier General Carl A. Strock

Brigadier General Carl A. Strock enlisted in the Army in 1971 and received his commission as an infantry second lieutenant following graduation from Officer Candidate School in 1972. In between and during assignments, he also completed Ranger and Special Forces training, the Infantry Officer Advanced Course, the U.S. Army Command and General Staff College and the National War College.

Holding diverse positions at installations all over the United States and in Europe has given him extensive leadership experience in troop units. "Over the years, I commanded a special forces detachment, a mechanized infantry company, an airborne engineer battalion, and an armored engineer brigade. That diversity of experience has really helped me understand the field Army and its engineer support requirements," said BG Strock.

BG Strock has also had staff assignments as an instructor, a personnel specialist, and an installation chief of staff. His current position as Director of Military Programs at Headquarters nicely rounds out his engineering experience.

When asked to describe what he considers the key success factors in his 30-year career, BG Strock quickly answered, "First, my love of public service and truly caring for the people I work with. Education and diverse experience are also important, but perhaps the most important element is doing your best at whatever job you are assigned."

Major highlights of BG Strock's career include assignment to the Mobile District as a Project Officer on the Tennessee-Tombigbee Waterway and as Resident Engineer at Columbus Air Force Base in the early '80s. With the 307th Engineer Battalion (Combat) (Airborne), 82nd Airborne Division at Fort Bragg, North Carolina, he served as Battalion Operations Officer, Assistant Division Engineer, and Battalion Executive Officer and participated in Operation Urgent Fury in Grenada.

"In 1987, I was given one of my more interesting assignments as U.S. Army Exchange Officer and Senior Tactics Instructor at the Royal School of Military Engineering in Chatham, Kent, England," said BG Strock. "I enjoyed the teaching experience as well as operating in a different culture. I learned much from the British Army, but the experience also reinforced my confidence in how we do things in our Army."

He returned to the United States just in time to lead the 307th Engineer Battalion through Operation Just Cause in Panama and Operations Desert Shield and Desert Storm in Saudi Arabia and Iraq. "Leading soldiers in combat is one of the most daunting, yet satisfying, duties an officer can have. Our troops were focused, motivated, and well-trained, so we accomplished our mission and all came home safely." reminisced BG Strock.

During the early 1990s, BG Strock served in the National Capitol Region, including stints as Colonels Assignment Officer at the U.S. Army Personnel Command and Personnel Staff Officer with the Army's Deputy Chief of Staff for Personnel in the Pentagon. Later, he took command of the Engineer Brigade of the 24th Infantry Division at Fort Stewart, Georgia, until he was reassigned as Chief of Staff, U.S. Army Engineer Training Center and Fort Leonard Wood in Missouri.

Selected for promotion to brigadier general in 1997, BG Strock took command of the Pacific Ocean Division, U.S. Army Corps of Engineers, in Honolulu, Hawaii. Two years later, he became the commander of the Northwestern Division, U.S. Army Corps of Engineers, headquartered in Portland, Oregon. He assumed his present position as Director of Military Programs, US Army Corps of Engineers, in Washington, DC, in September 2001.

As Director of Military Programs, he is responsible for worldwide execution of the Corps of Engineers' annual $8 billion military program. "This comprises military construction, environmental restoration, installation support as well as international and interagency support," explained BG Strock. "To help execute the mission, we have to work closely with our eight divisions around the world and 41 subordinate districts."

BG Strock holds a Bachelor of Science degree in civil engineering from the Virginia Military Institute and a Master of Civil Engineering degree from Mississippi State University. He is a registered professional engineer in the State of Missouri.

BG Strock has earned numerous military decorations, including the Distinguished Service Medal, Legion of Merit (2), the Bronze Star Medal (2), the Meritorious Service Medal (3), the Army Commendation Medal (2), and the Army Achievement Medal. A member of Tau Beta Pi, he is also active in the Society of American Military Engineers and the Army Engineer Association.

Married to the former Juliana M. Moore of Atlanta, Georgia, BG Strock has two sons, Christopher and John, a daughter-in-law, Anna, and a granddaughter, Emma. During his infrequent free moments, he enjoys boating and spending time outdoors. PWD

DPW Worldwide Training Workshop Highlights